ORDER NO. MD0303095C2

Service Manual

CD Stereo System

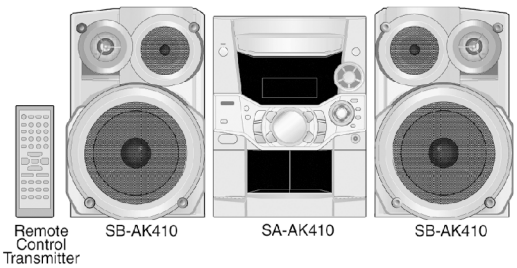
SA-AK410E / SA-AK410EB / SA-AK410EG

Colour

(S)... Silver Type

TAPE SECTION :

SG-2W MECHANISM SERIES



SPECIFICATIONS

Specifications

■ AMPLIFIER SECTION

RMS Power output	
THD 10%, both channels driven	
1kHz	
(Low channel)	**75 W per channel (6 Ω)**
10kHz	
(High channel)	**75 W per channel (6 Ω)**
Total Bi-Amp power	**150 W per channel**
Input sensitivity	
AUX	**250 mV**
Input Impedance	
AUX	**13.3 k Ω**

■ FM TUNER SECTION

Frequency range	**87.50 - 108.00 MHz (50 kHz steps)**
Sensitivity	**1.8 μ V (IHF)**
S/N 26 dB	**1.5 μ V**
Antenna terminal(s)	**75 Ω (unbalanced)**

■ AM TUNER SECTION

Frequency range	**522 - 1629 kHz (9 kHz steps)**
Sensitivity	
S/N 20 dB (at 999 kHz)	**560 μ V/m**

■ CASSETTE DECK SECTION

Track system	**4 track, 2 channel**
Heads	
Record/playback	**Solid permalloy head**
Erasure	**Double gap ferrite head**
Motor	**DC servo motor**
Recording system	**AC bias 100 kHz**
Erasing system	**AC erase 100 kHz**
Tape speed	**4.8 cm/s**
Overall frequency response (+3 dB, -6 dB at DECK OUT)	
NORMAL (TYPE I)	**35 Hz - 14 kHz**
S/N	**50 dB (A weighted)**
Wow and flutter	**0.18% (WRMS)**
Fast forward and rewind time	**Approx. 120 seconds with C-60 cassette tape**

■ CD SECTION

Sampling frequency	**44.1 kHz**
Decording	**16 bit linear**
Pickup	
Beam source/wavelength	**Semiconductor laser/780 nm**
Number of channels	**Stereo**
Frequency response	**20 Hz - 20 kHz (+1, -2 dB)**
Wow and flutter	**Below measurable limit**
Digital filter	**8 fs**
D/A converter	**MASH (1 bit DAC)**
MP3	

Bit rate	**32 kbps-320 kbps**
Sampling frequency	**32 kHz, 44.1 kHz, 48 kHz**
■ **GENERAL**	
Power supply	**AC 230-240 V, 50Hz**
Power consumption	**242 W**
Power Consumption in standby mode	**0.5 W**
Dimensions (W x H x D)	**250 x 330 x 370 mm**
Mass	**7.8 kg**
■ **SYSTEM**	
SC-AK410 (E)	**Music center: SA-AK410 (E)**
	Speaker: SB-AK410 (EG)
SC-AK410 (EB)	**Music center: SA-AK410 (EB)**
	Speaker: SB-AK410 (EG)
SC-AK410 (EG)	**Music center: SA-AK410 (EG)**
	Speaker: SB-AK410 (EG)

Notes:

1. Specifications are subject to change without notice. Mass and dimensions are aproximate.

2. Total harmonic distortion is measured by the digital spectrum analyzer.

3. The labels"HIGH" and"LOW" on the rear of the speakers refer to High frequency and Low frequency.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C520 and C540 through a 10 Ω , 5W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 230V, 50 Hz in NO SIGNAL mode should be ~350mA.

2. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.

- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are

"shorted", or if speaker systems with an impedance less than the indicated rated impedance of

the amplifier are used.
If this occurs, follow the procedure outlines below:

1. Turn off the power.

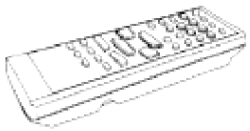
2. Determine the cause of the problem and correct it.

3. Turn on the power once again after one minute.

Note :
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

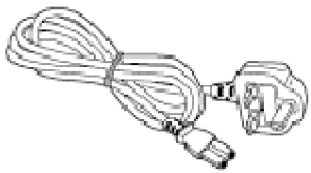
3. Accessories

Remote control transmitter

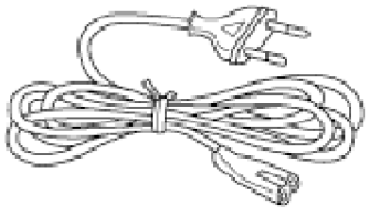


FM indoor antenna

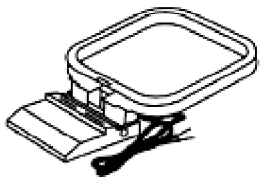
AC power supply cord (For EB only)



AC power supply cord (For E & EG only)



AM loop antenna



4. Caution for AC Main Lead

(For "EB" area code model only.)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OFF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use
Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

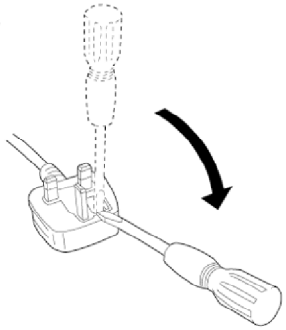
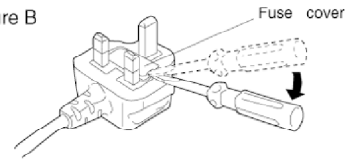


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

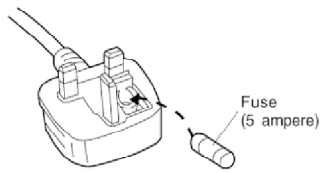
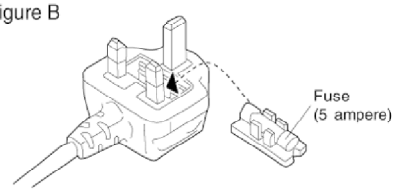


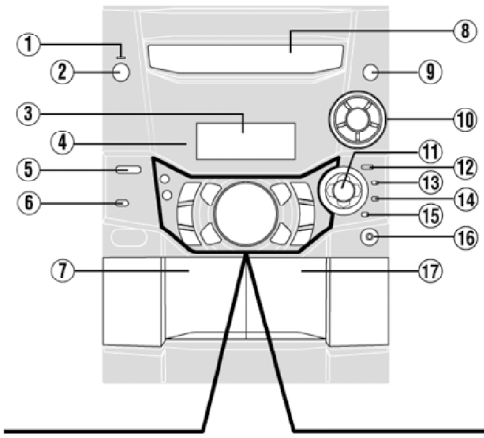
Figure B



5. Operation Procedures

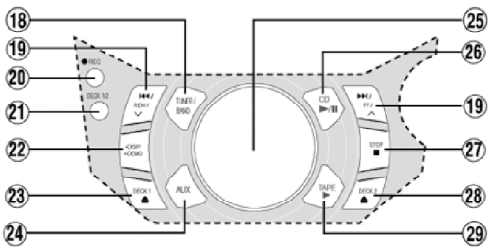
Front panel controls

Main unit



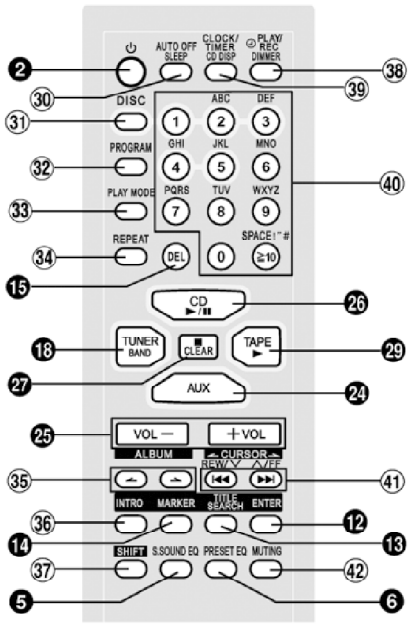
① AC supply indicator (AC IN)
This indicator lights when the unit is connected to the AC mains supply.
② Standby/on switch (⏻/I)
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
③ Display
④ Remote control signal sensor
⑤ Super sound EQ button (SUPER SOUND EQ)
⑥ Preset EQ select button (PRESET EQ)
⑦ Deck 1 cassette holder
⑧ Disc tray
⑨ CD tray open/close button (⏏, OPEN/CLOSE)
⑩ CD direct play buttons (1 ~ 5)
⑪ Joystick
⑫ Enter button (ENTER)
⑬ Title search mode select button (TITLE SEARCH)
⑭ Marker memory/recall button
(MARKER, –MEMORY, -RECALL)
⑮ Delete button (DELETE)
⑯ Headphones jack (PHONES)
⑰ Deck 2 cassette holder

Center console



⑱ Tuner/band select button (TUNER/BAND)
⑲ CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust buttons (I◄◄/REW/∨, ►►I/FF/∧)
⑳ Record button (● REC)
㉑ Deck select button (DECK 1/2)
㉒ Display, demonstration button (-DISP/–DEMO)
㉓ Deck 1 open button (⏏, DECK 1)
㉔ AUX button (AUX)
㉕ Volume control (VOLUME DOWN, UP)
㉖ CD play/pause button (►/ II, CD)
㉗ Stop/program clear button (■, STOP)
㉘ Deck 2 open button (⏏, DECK 2)
㉙ Tape play button (►, TAPE)

Remote control



Buttons such as ❷ function in exactly the same way as the buttons on the main unit.
㉚ Sleep timer + Auto off button (SLEEP, AUTO OFF)
㉛ Disc button (DISC)
㉜ Program button (PROGRAM)
㉝ Play mode select button (PLAY MODE)
Use this for selecting CD play mode, tune mode, FM mode and AM beat proof.
㉞ Repeat button (REPEAT)
㉟ Album skip buttons (⌢ , ⌣ , ALBUM)
㊱ Intro button (INTRO)
㊲ Shift button (SHIFT)
To use functions labelled in orange ※:
While pressing [SHIFT], press the corresponding button.
※ For buttons [AUTO OFF], [CLOCK/TIMER] and [⏲PLAY/REC]
㊳ Dimmer + Play timer/record timer button
(DIMMER, ⏲PLAY/REC)
㊴ For Russia, Ukraine, Australia and New Zealand:
CD display + Clock/timer button (CD DISP, CLOCK/TIMER)
㊵ Numbered, character buttons
(≧10, 1–9, 0, A-Z, SPACE!"#)
㊶ CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust, cursor buttons
(I◄◄, REW/∨, ⌢ CURSOR, ►►I, ∧/FF, CURSOR ⌣)
㊷ Muting button (MUTING)

6. Handling the Lead-free Solder

6.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control,please set it to 700 ± 20°F (370 ± 10°C).

- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).

- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

7. Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.
So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

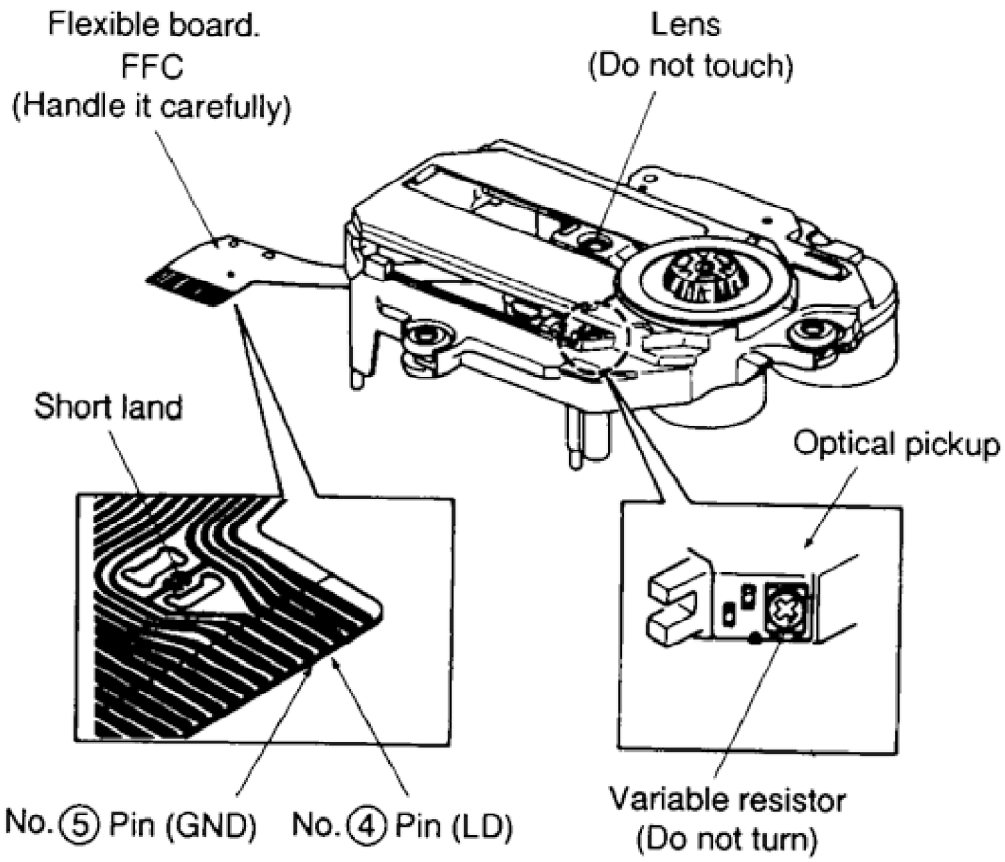
- Handling of traverse deck (optical pickup)

1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.

2. The short land between the No.4(LD) and No.5(GND) pins on the flexible board (FFC) is shorted with a solder build-up to prevent damage to the laser diode.To connect to the PC board, be sure to open by removing the solder build-up, and finishthe workquickly.

3. Take care not to apply excessive stress to the flexible board (FFC).

4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.



- Grounding for electrostatic breakdown prevention

1. Human body grounding

Use the anti-static wrist strap to discharge the static electricity from your body.

2. Work table grounding

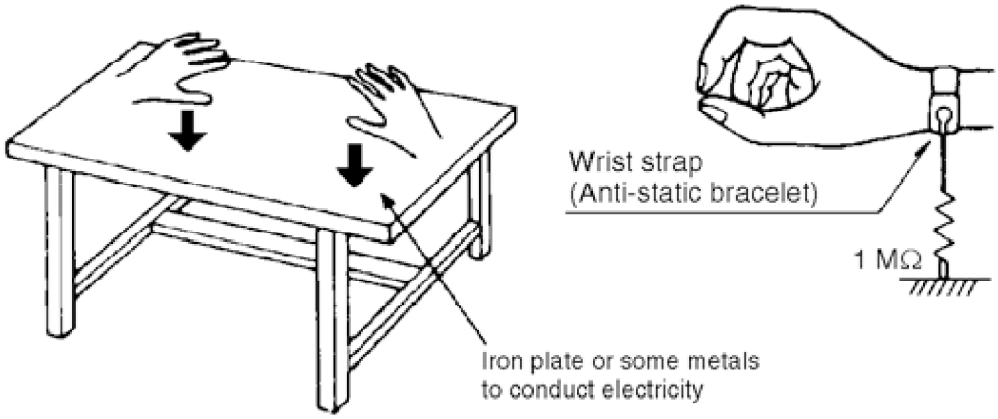
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution :

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Caution when Replacing the Traverse Deck :

The traverse deck has a short point shorted with solder to protect the laer diode against electroststics breakdown. Be sure to remove the solder from the short point before making connections.



8. Operation Checks and Component Replacement Procedures

“ATTENTION SERVICER”

Some chassis components may have sharp edges.
Be careful when disassembling and servicing.

1. **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For reassembly after operation checks or replacement, reverse the respective procedures.**
   Special reassembly procedures are described only when required.
3. **Select items from the following index when checks or replacement are required.**

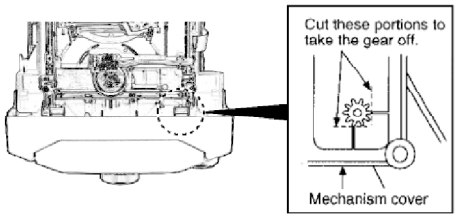
Warning:

This product uses a laser diode. Refer to caution statement Precaution of Laser Diode.

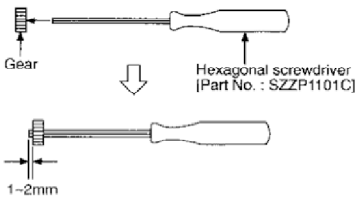
Gear for servicing (jig) information

1. This unit has a gear which is used for checking items (Open/close of disc tray, up/down operation of traverse unit by manually) when servicing.
2. For preparation of gear (for servicing), Perform the procedures as follows.
3. In case of re-servicing the same set, the "gear for servicing" may has been taken off because it has been used. The "gear for servicing" must be stored.

1. Remove the gear provided with mechanism cover as shown below.

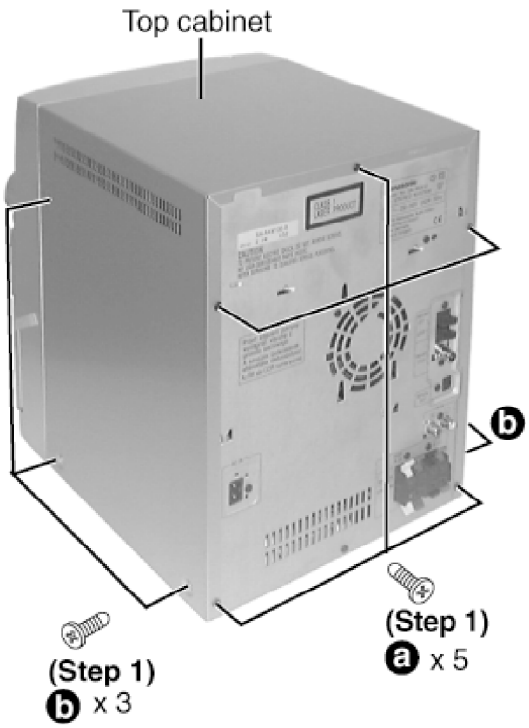


2. Insert the hexagonal screwdriver (2mm) into the gear, and then project the tip of screwdriver for 1~2mm in length.



8.1. Checking for Main P.C.B.

Step 1 Remove 3 screws each side and 5 screws at rear panel.
Step 2 Lift up both sides of cabinet ass'y, push the cabinet ass'y toward the rear and remove the cabinet ass'y.



- Checking the Main P.C.B. as shown below.

8.2. Disassembly for the CD changer ass'y

(The CD changer unit can be removed after the CD Lid is removed)

8.2.1. Disassembly for the CD Lid

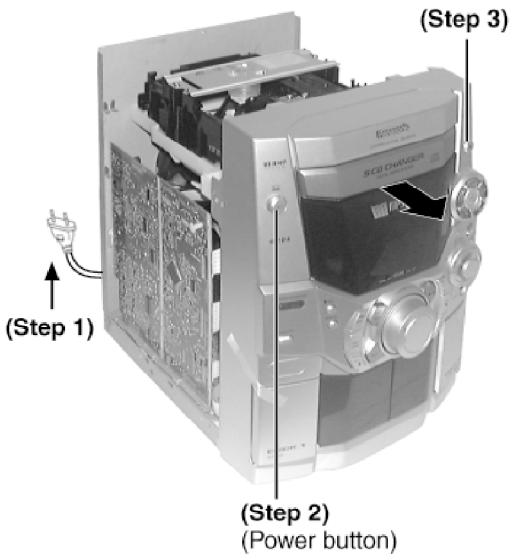
- Follow the (Step 1) - (Step 2) of Item 8.1.

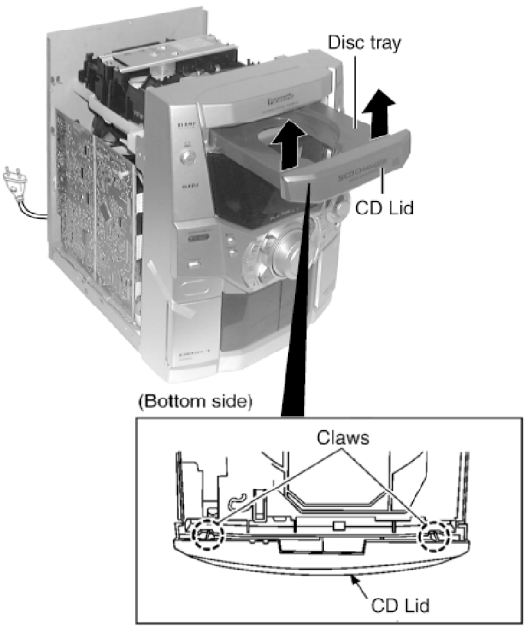
When opening the disc tray automatically (Using Power Supply)

Step 1 Connect the AC power cord.

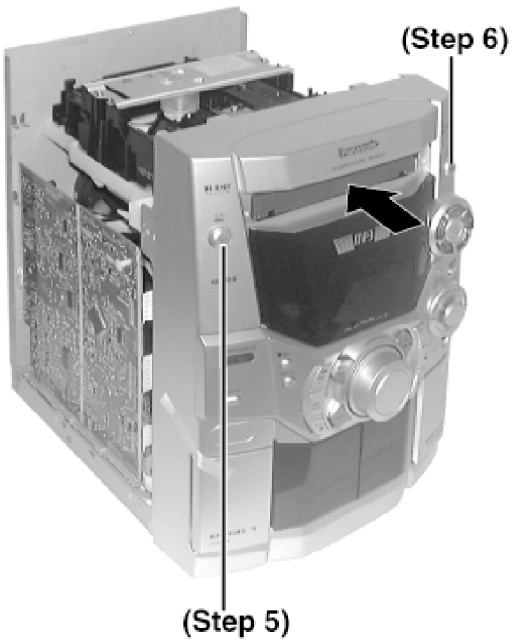
Step 2 Press the POWER button to power up the main unit.

Step 3 Press the OPEN/CLOSE button, the disc tray will be open automatically.

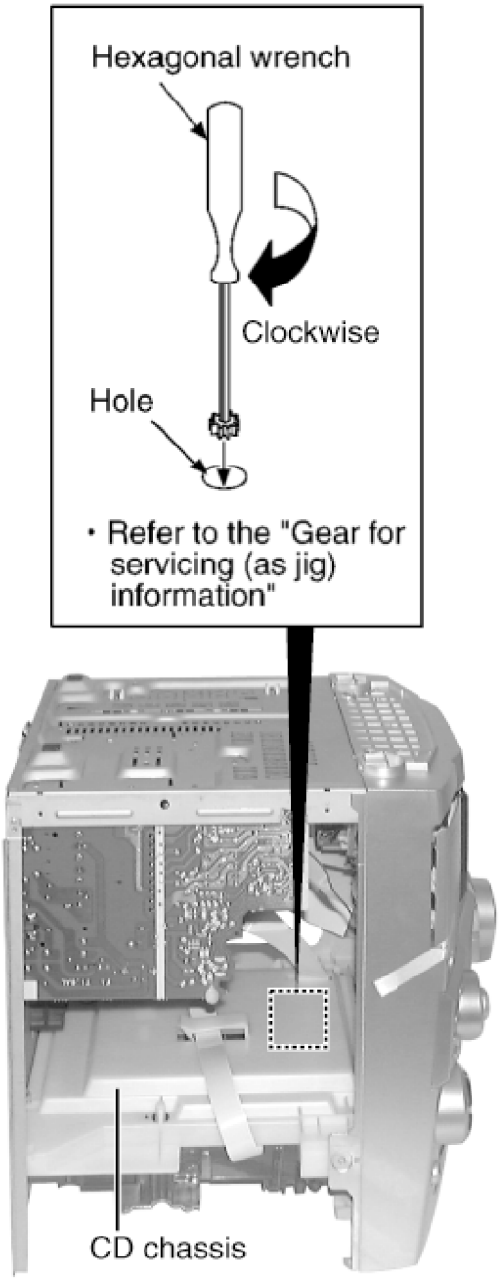




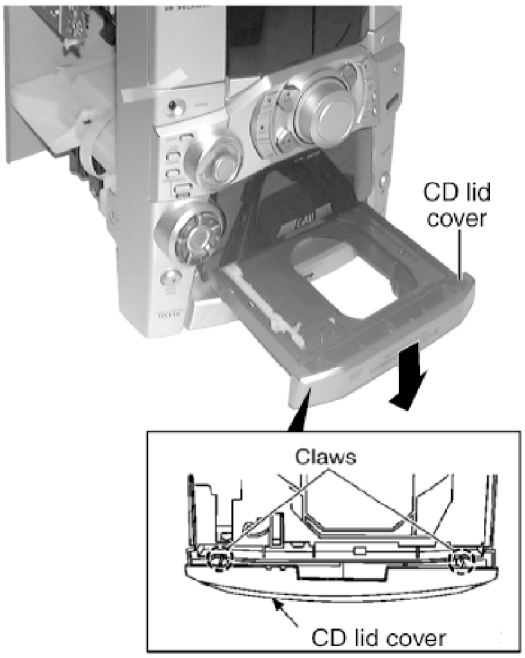
Step 4 Release the 2 claws, and then remove the CD Lid.



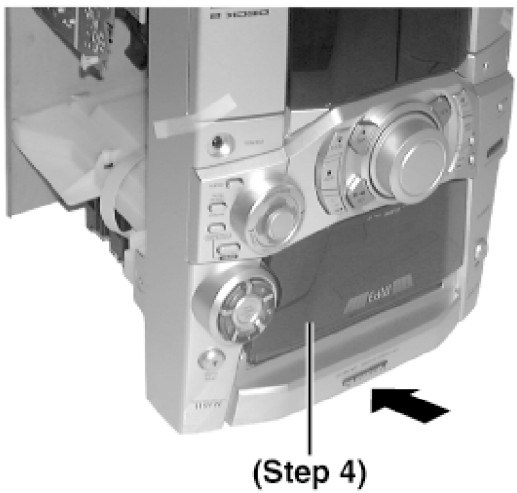
Step 5 Press the POWER button to turn the power on.
Step 6 Press the OPEN/CLOSE button, the disc tray will be close.
[Open the disc tray manually (Using service tools)]
Step 1 Upset the unit as shown below.



Step 2 Insert the gear tool into the hole on the underside of CD chasis and then rotate in the direction of arrow. The disc tray will be open.



Step 3 Release the 2 claws, and then remove the CD lid cover.



Step 4 Push the disc tray.

8.2.2. Disassembly for CD changer unit

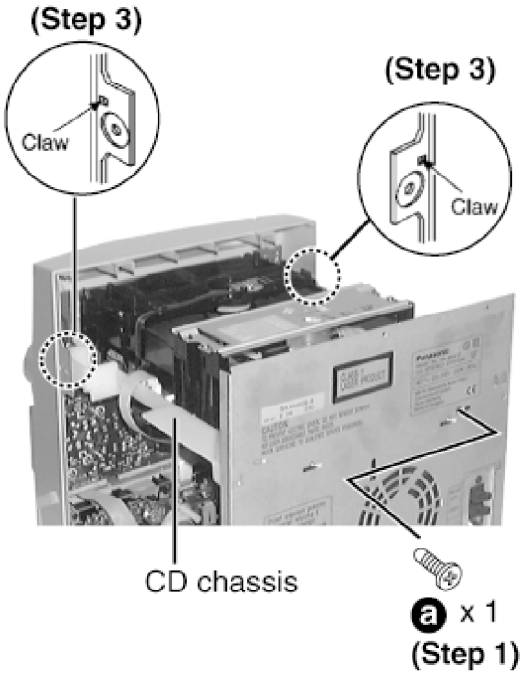
- Follow the (Step 1) - (Step 2) of Item 8.1.

- Follow the Disassembly for the CD Lid of Item 8.2.1.

Step 1 Remove 2 screws at rear cabinet as show below.

Step 2 Lift up the mechanism unit cover, and then push in the mechanism unit cover.

Step 3 Release the claws of both ends, and then lift up the CD changer unit.



Step 4 Upset the CD changer unit.
Step 5 Place the CD changer unit on the unit.

<The preparation of checking procedures in operational condition is completed>

8.3. Checking for the unit operational condition

(Place the unit horizontally when loading the CD changer unit.)

8.3.1. Initial setting of CD

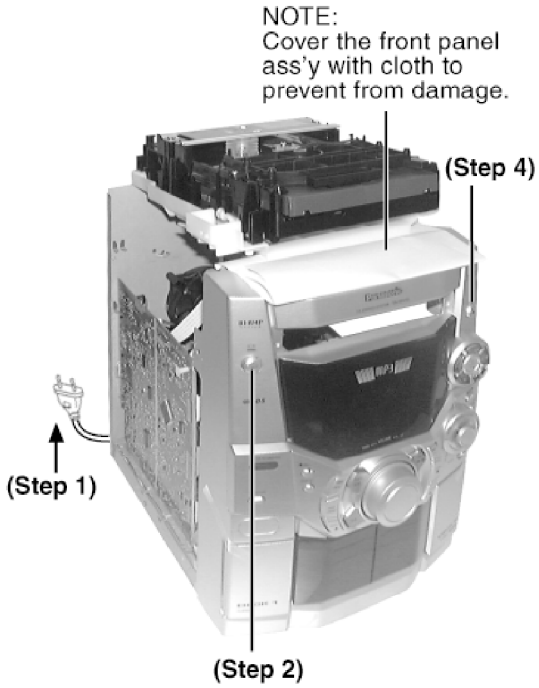
- Follow the (Step 1) - (Step 2) of Item 8.1.

- Follow the Disassembly for the CD Lid of Item 8.2.1.

Step 1 Connect the AC power cord.

Step 2 Press POWER button to turn on power for main unit.

Step 3 Select the input select button to "CD".



Step 4 Push the OPEN/CLOSE button, and then open the disc tray.

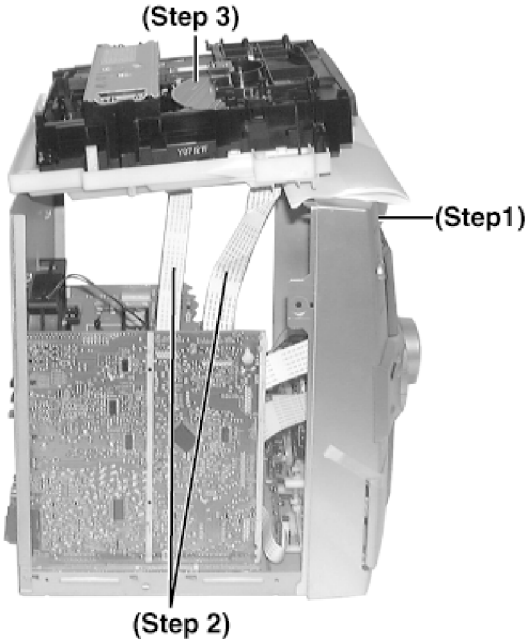
Step 5 Put the CD into the disc tray.

Step 6 Press the OPEN/CLOSE button 1, and then close the disc tray. (Then, the CD will load.)
<The initial setting of CD unit is completed.>

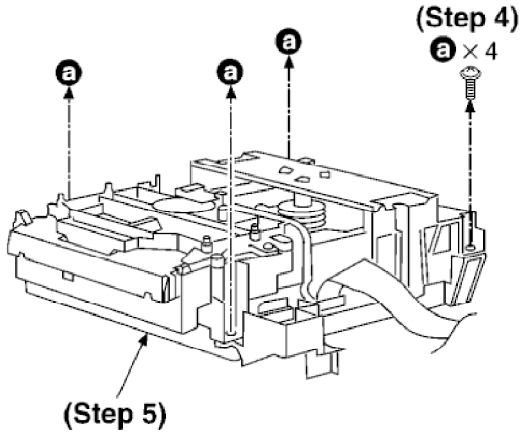
8.3.2. Checking for the CD Servo P.C.B., Panel P.C.B., Deck P.C.B., Transformer P.C.B. and Power P.C.B.

- **Follow the (Step 1) - (Step 2) of Item 8.1.**
- **Follow the Disassembly for the CD Lid of Item 8.2.1.**
- **The initial setting of CD unit must be completed. (Refer to the initial setting of CD unit in Item 8.3.1).**
- **Check for CD Servo P.C.B.**
- **The initial setting of CD unit must be completed. (Refer to the initial setting of CD unit in item 8.3.1.)**

Step 1 Push the power button and the power turns OFF.
Step 2 Remove the FFC boards.
Step 3 Remove the CD changer unit.



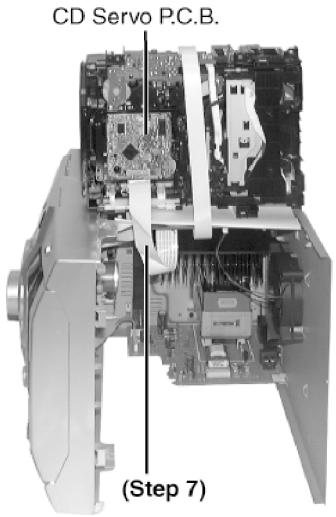
Step 4 Remove 4 screws.



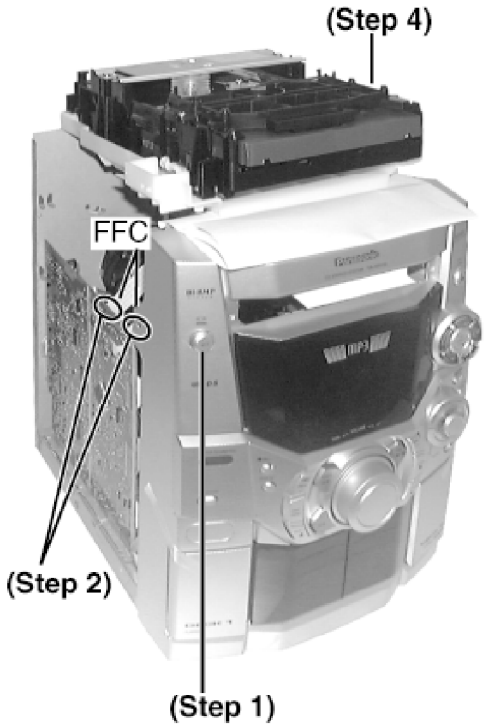
Step 5 Remove the mechanism unit cover.

- Check the CD Servo P.C.B. as shown below

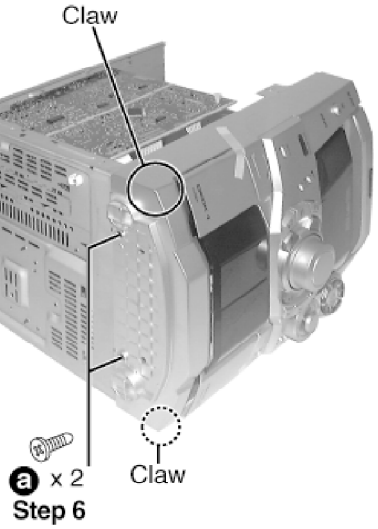
Step 6 Lay the unit.



Step 7 Connect the FFC board (19 pin) from CD servo P.C.B..
Step 1 Press the POWER button and the power turns off.
Step 2 Remove the connectors.
Step 3 Pull out the FFCs.
Step 4 Remove the CD changer unit.



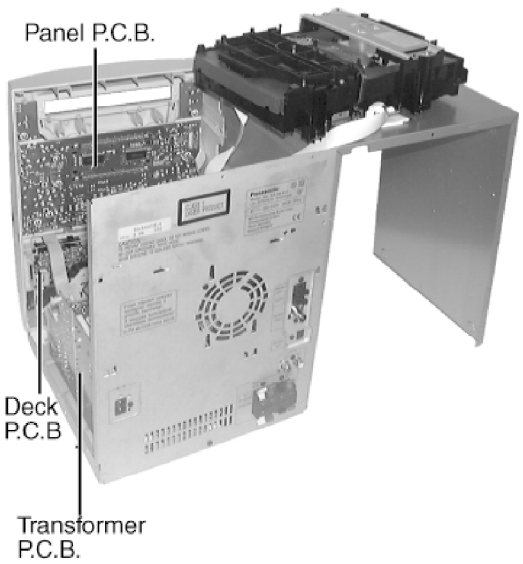
Step 5 Lay the unit as shown below.

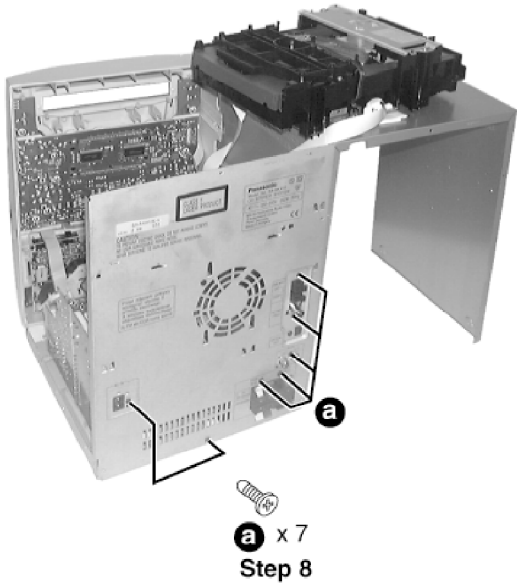


Step 6 Remove 2 screws.

Step 7 Release the 2 claws, and then draw the front panel ass'y.

- Check the Panel P.C.B., Deck P.C.B. and Transformer P.C.B. as shown below





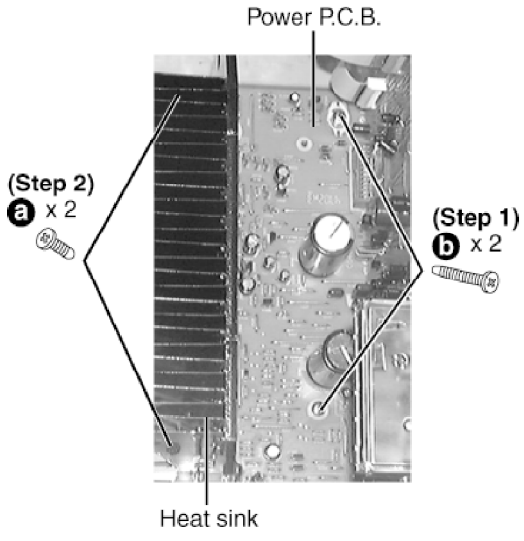
Step 8 Release the 6 screws, and then remove the rear cover.

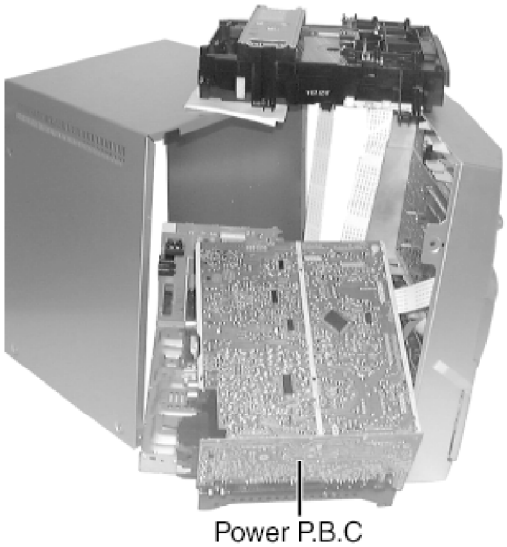
- Checking the Power P.C.B. as shown below

- Follow the (Step 1) - (Step 2) of Item 8.1.

- Follow the (Step 1) - (Step 6) of Disassembly for the CD Lid of Item 8.2.1.

- Follow the (Step 1) - (Step 8) of Checking for Panel P.C.B.,Deck P.C.B., Transformer P.C.B. and Power P.C.B. of Item 8.3.2.





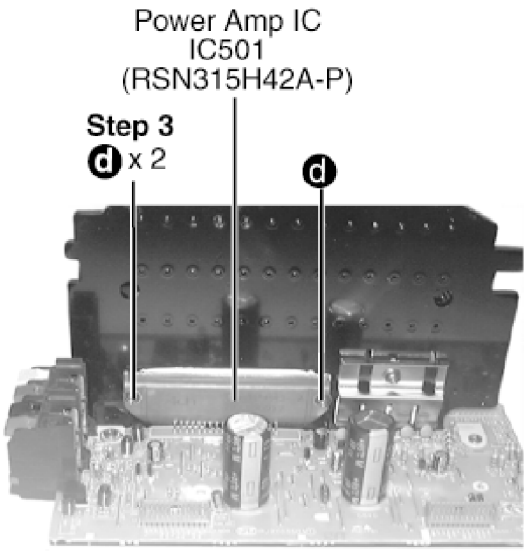
NOTE:
Insulate Power P.C.B. with insulation material to avoid short circuit.

8.3.3. Replacement of the Power Amplifier IC

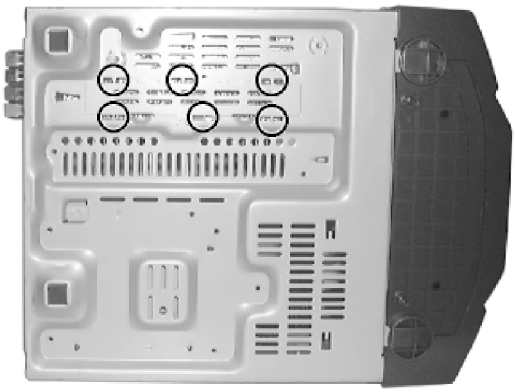
- Checking the Power P.C.B.

- Follow the (Step 1) - (Step 2) of Item 8.1.

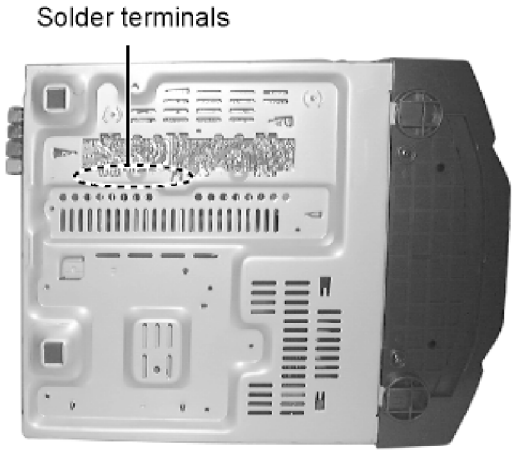
Step 1 Remove the 2 screws fixed to the Power Amplifier IC.

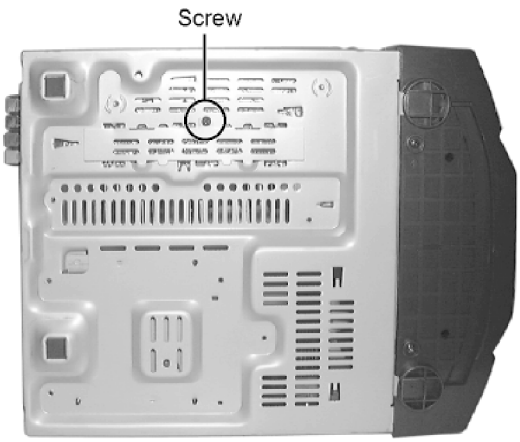


Step 2 Remove 2 screws fixed to the Power Amplifier IC and Transistor Holders.
Step 3 Break the joint with a metal cutter as shown below.



Step 4 Unsolder the terminals of Power Amp IC, transistor and replace the component.





Step 5 Fix back the chasis with a screw as shown.

8.4. Main Component Replacement Procedures

8.4.1. Replacement of the Traverse Deck

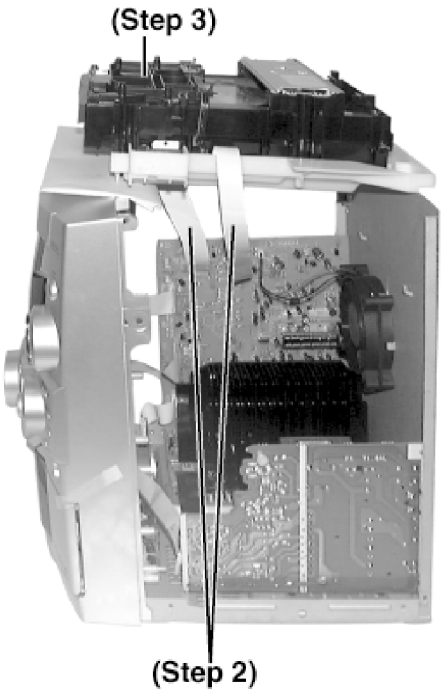
- Follow the (Step 1) - (Step 2) of Item 8.1.

- Follow the (Step 1) - (Step 6) of Disassembly for the CD Lid of Item 8.2.1.

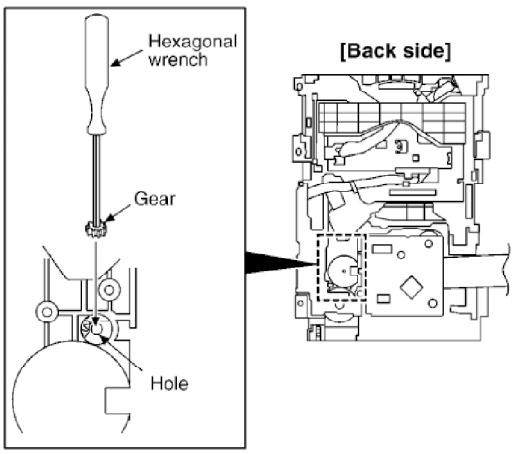
- Follow the Disassembly instruction for the CD changer unit of Item

8.2.2.

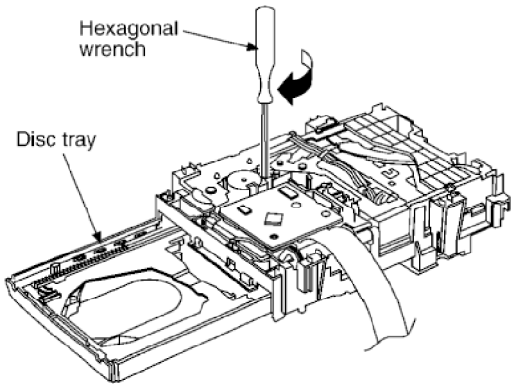
Step 1 Push the power button and the power turns OFF.



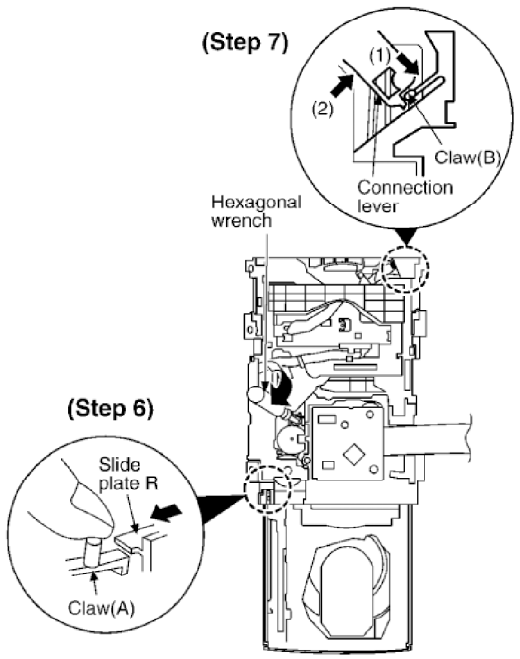
Step 2 Remove the FFC boards.
Step 3 Remove the CD changer unit.



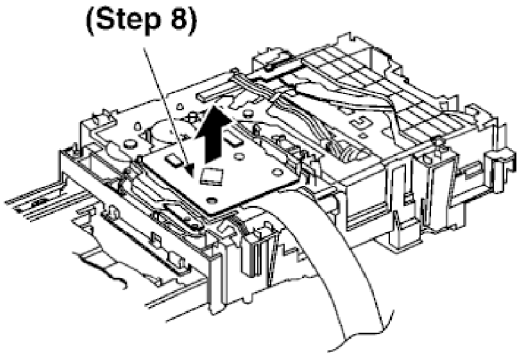
Step 4 Insert the gear with hexagonal wrench into the hole.



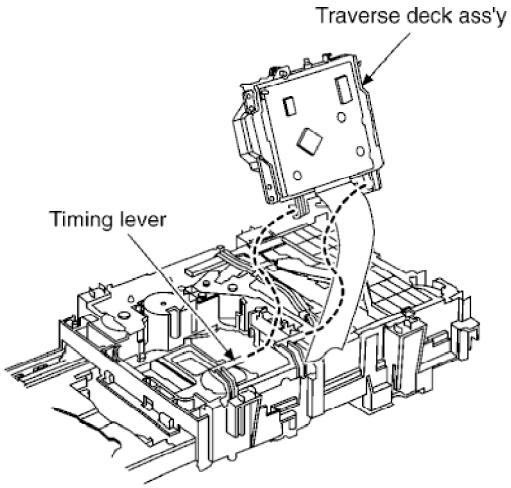
Step 5 Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.



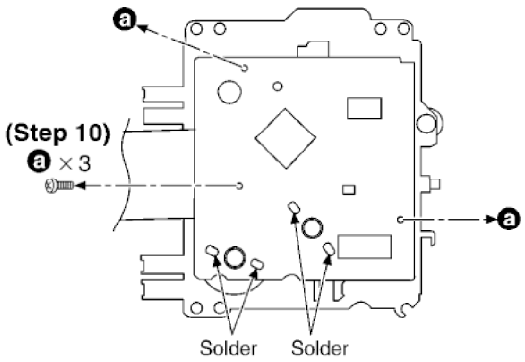
Step 6 With pressing the claw (A), rotate the hexagonal wrench clockwise. (The slide plate R moves for a little amount.)
Step 7 Pressing the claw (B) in the direction of arrow (1), the connection lever moves in the direction of arrow (2).



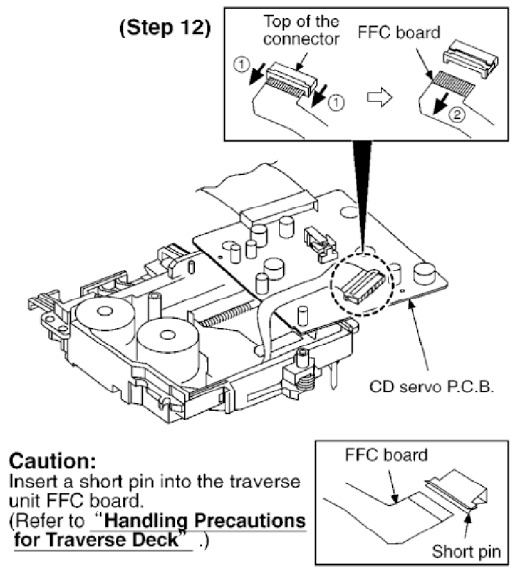
Step 8 Lift up the traverse deck ass'y.



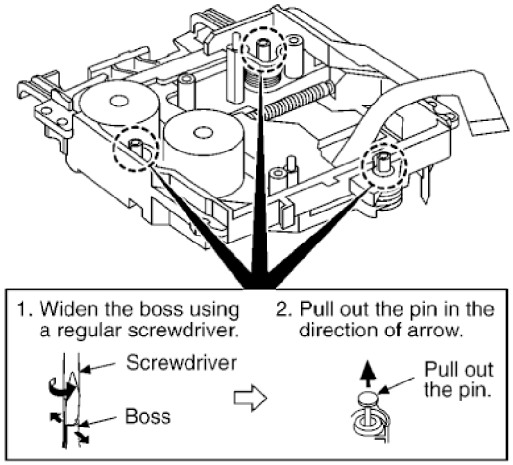
Step 9 Remove the traverse deck ass'y from the timing lever.
Caution:
When removing or inserting the traverse deck avoid touching the OPU lens and pressing onto the turntable.



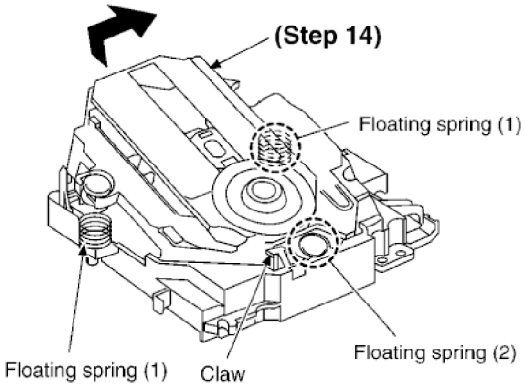
Step 10 Remove 3 screws.
Step 11 Unsolder the motor terminals (4 points).



Step 12 Remove the FFC board from the connector, and then remove the CD Servo P.C.B.


1. Widen the boss using a regular screwdriver.
Screwdriver
Boss
2. Pull out the pin in the direction of arrow.
Pull out the pin.

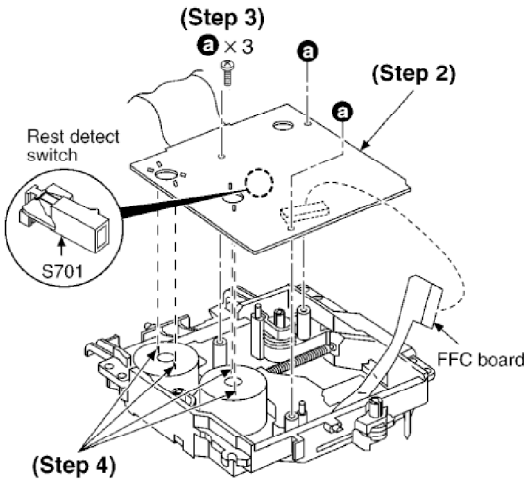
Step 13 Remove the pin.



Step 14 Release the claw, and then remove the traverse deck ass'y.
Note:
Be careful not to lose the 3 floating spring because those will also be removed on removal of the traverse deck ass'y.

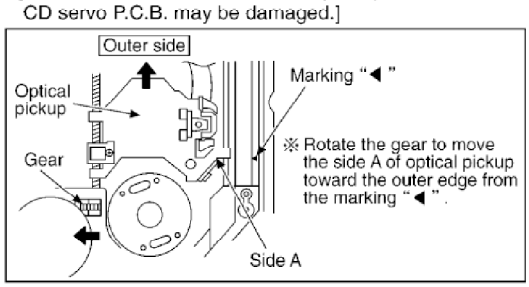
- Installation of the CD Servo P.C.B. after replacement

Step 1 Connect the FFC board.
Step 2 Install the CD servo P.C.B. in the traverse deck ass'y.
Step 3 Remove 3 screws.
Step 4 Solder.

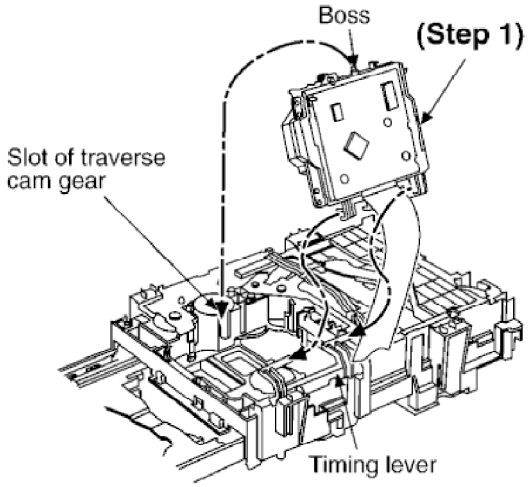


- Note for installation of the CD servo P.C.B.

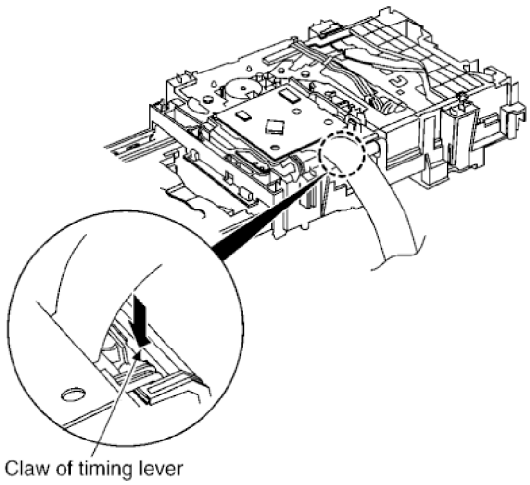
Before installing the CD servo P.C.B., move the optical pickup toward the outer edge from the mark "◀".
[Otherwise, the rest detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]


Outer side
Optical pickup
Gear
Marking "◀"
※ Rotate the gear to move the side A of optical pickup toward the outer edge from the marking "◀".
Side A

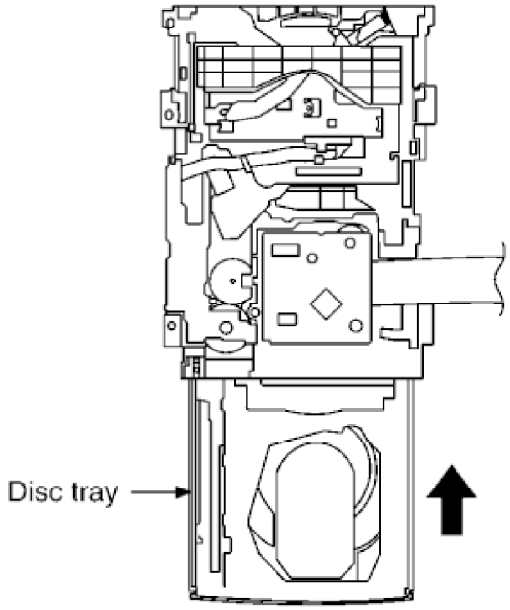
- Installation for traverse deck ass'y



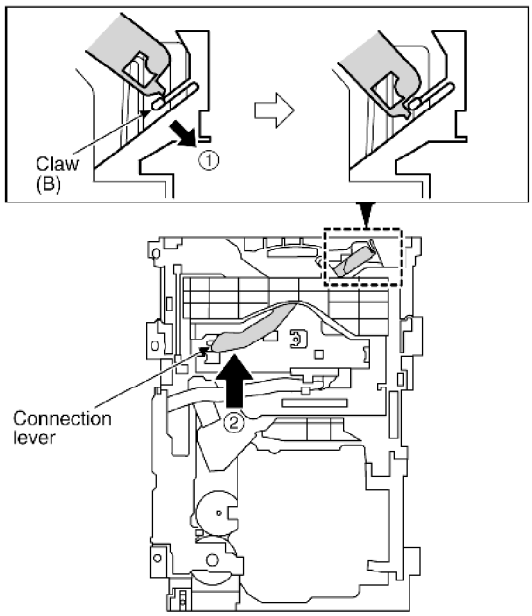
Step 1 Install the traverse deck ass'y to the timing lever.
Step 2 Align the boss of traverse deck ass'y with the slot of traverse cam gear.



Step 3 Force the claw of timing lever.



Step 4 Force the disc tray fully.



Step 5 With pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

8.5. Replacement for the disc tray

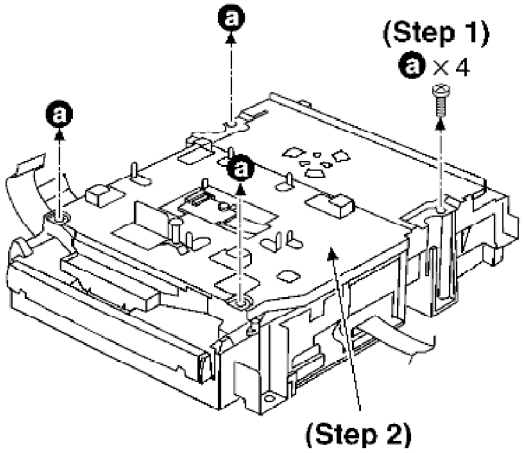
- Follow the (Step 1) - (Step 2) of Item 8.1

- Follow the Disassembly for the CD Lid of Item 8.2.1.

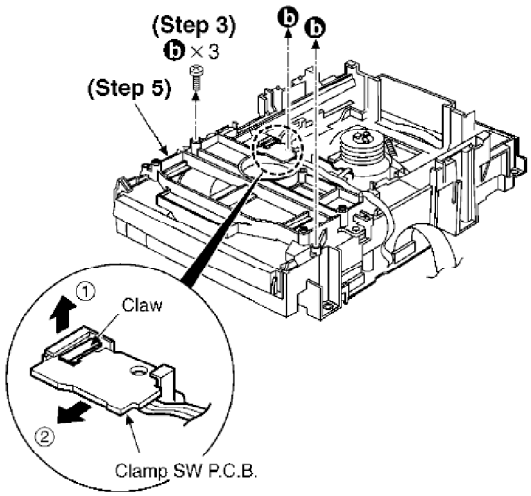
- Follow the Disassembly for the CD Changer Unit of Item 8.2.2.

- Follow the (Step 1) - (Step 8) of Item 8.4

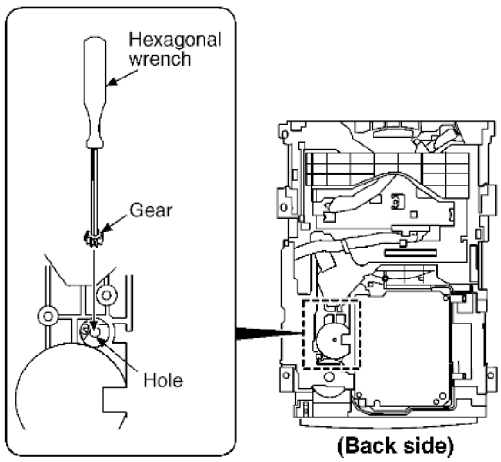
Step 1 Remove 4 screws.



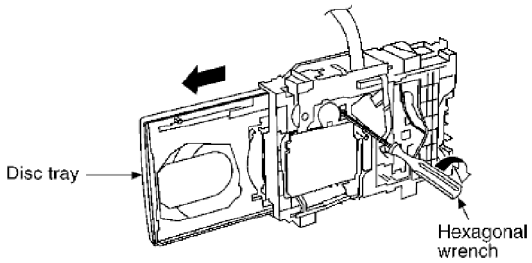
Step 2 Remove the upper plate.
Step 3 Remove 3 screws.



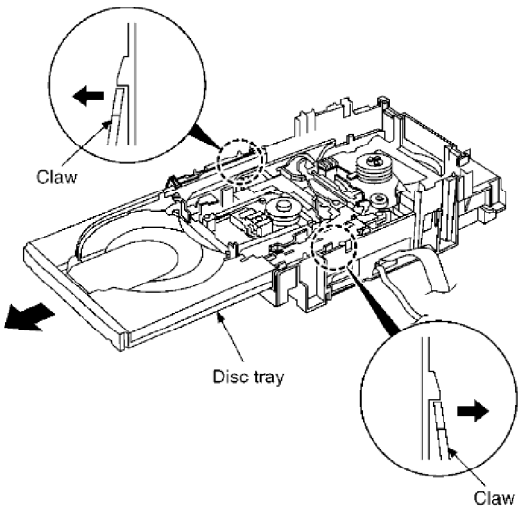
Step 4 With lifting the claw in the direction of (1), draw the clamp SW P.C.B. in the direction of arrow (2).
Step 5 Remove the mechanism cover.



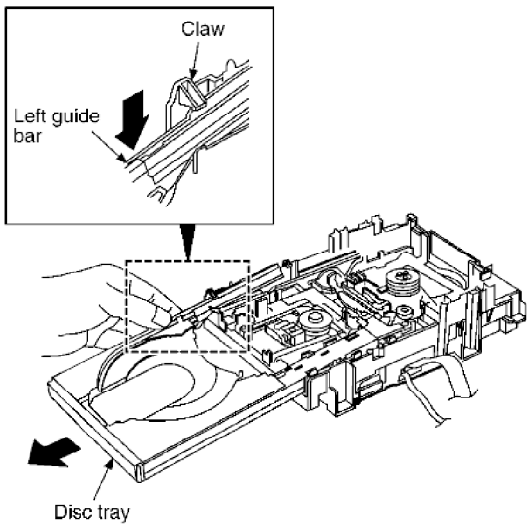
Step 6 Insert the gear with hexagonal wrench into the hole.



Step 7 Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.

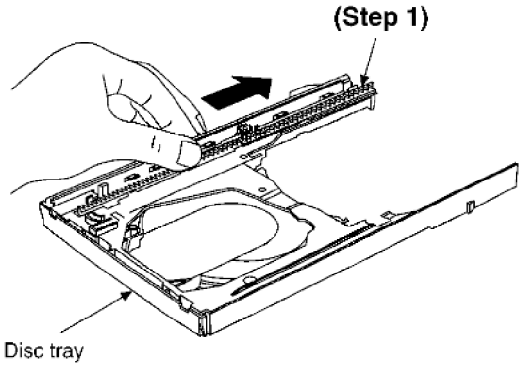


Step 8 Release the both claws, and then draw the disc tray.

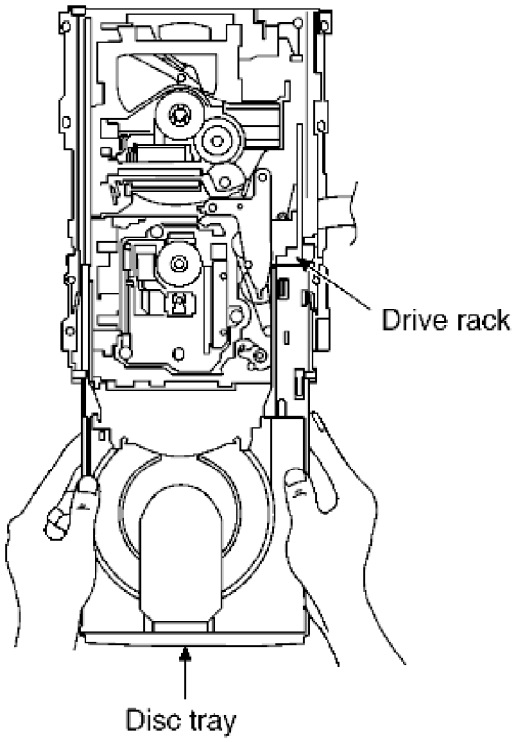


Step 9 With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.

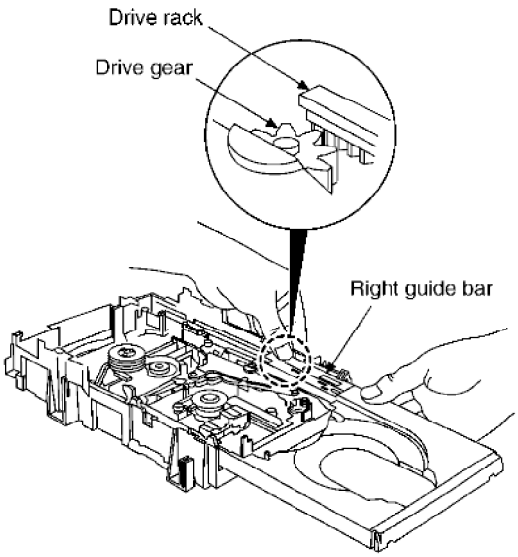
[Installation of the disc tray after replacement]



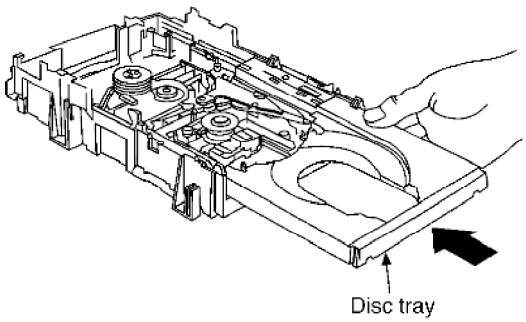
Step 1 Slide the drive rack fully in the direction of arrow.



Step 2 Holding the drive rack not to move, install the disc tray.
Step 3 Align the drive rack with the drive gear.



NOTE:
Force the right guide bar of tray base manually not to move upwards.

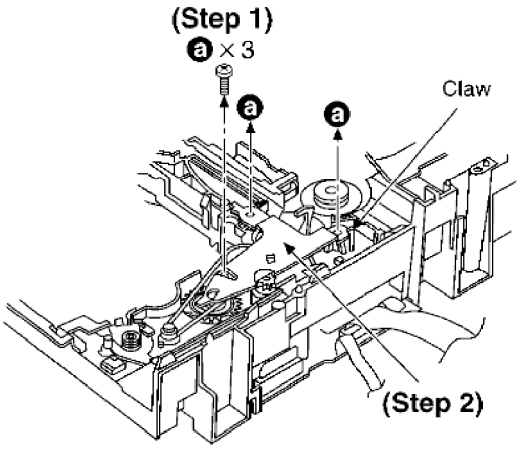


Step 4 Holding the disc tray manually, push the disc tray in the direction of the arrow.

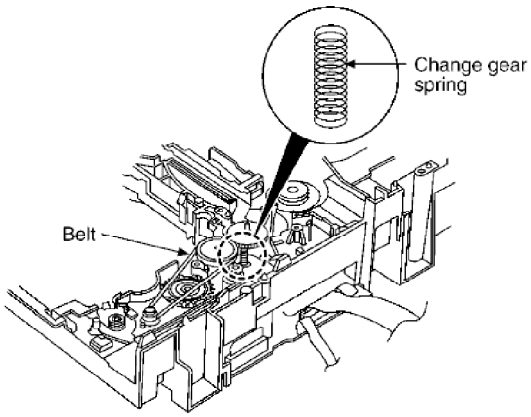
8.6. Disassembly and reassembly for mechanism base drive unit

- Follow the (Step 1) - (Step 2) of Item 8.1.
- Follow the Disassembly for the CD Lid of Item 8.2.1.
- Follow the Disassembly for the CD changer unit of Item 8.2.2.
- Follow the (Step 1) - (Step 14) of Item 8.4
- Follow the (Step 1) - (Step 9) of Item 8.5

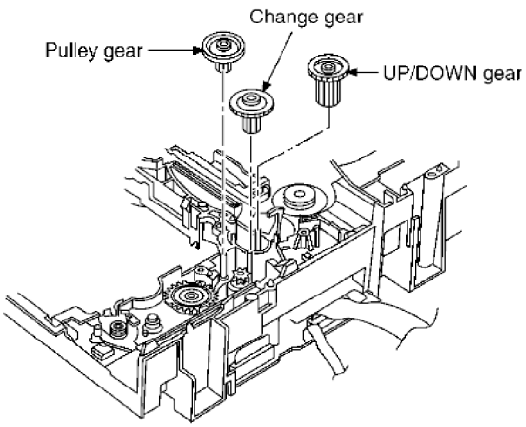
Step 1 Remove 3 screws.



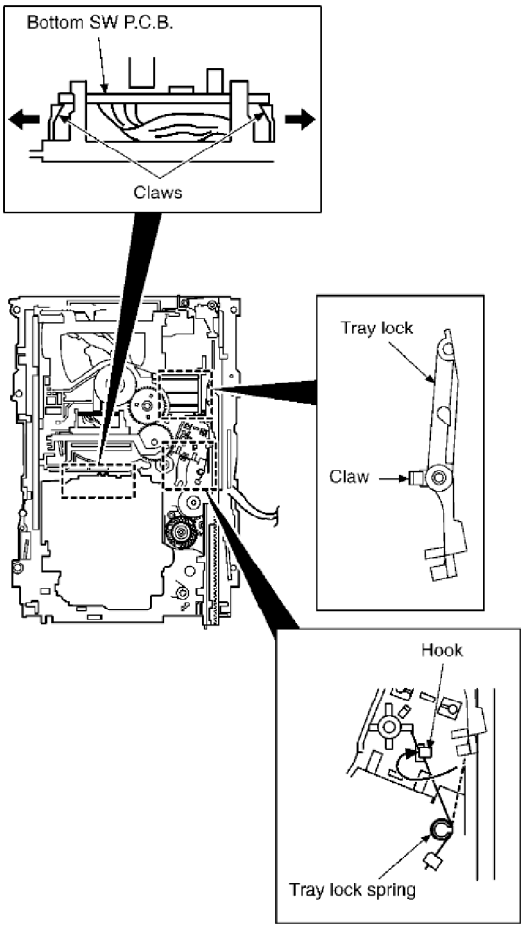
Step 2 Release the claw, and then remove the gear holder.
Step 3 Remove the belt and change gear spring.



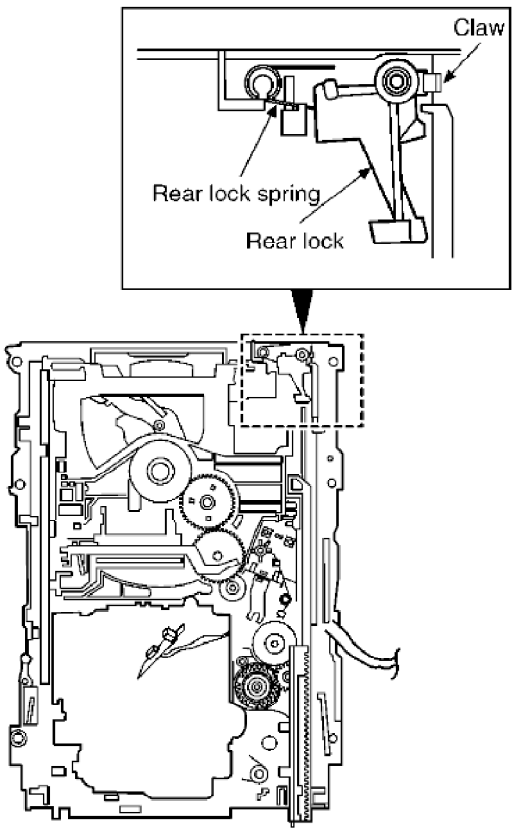
NOTE:
Take care not to lose the change gear spring.
Step 4 Remove the pulley gear, change gear and UP/DOWN gear.



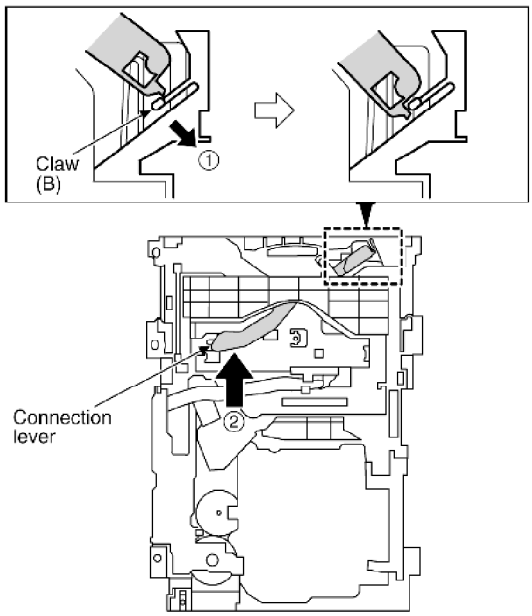
Step 5 Release the 2 claws, and then remove the bottom SW P.C.B..



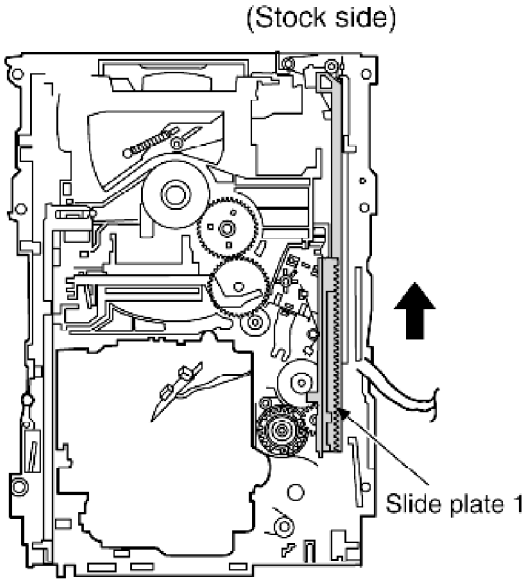
Step 6 Install the tray lock spring to hook temporary.
Step 7 Release the claw, and then remove the tray lock.
Step 8 Release the claw, and then remove the rear lock.



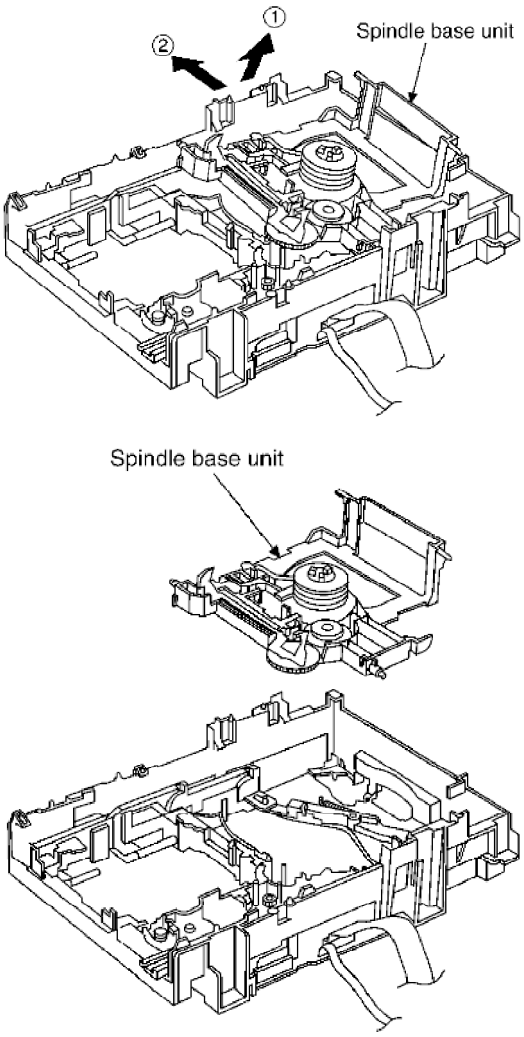
Step 9 Pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).



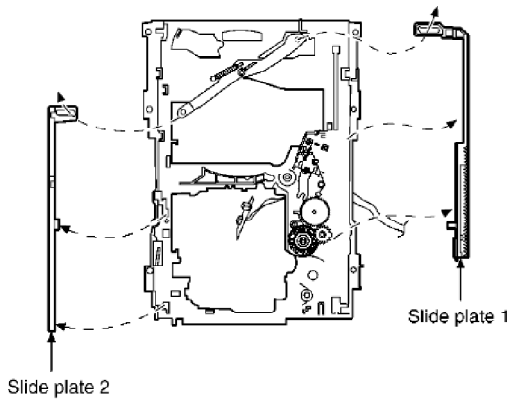
Step 10 Move the slide plate 1 to the end of stock side.



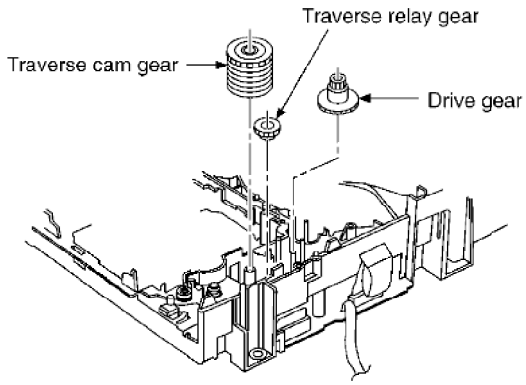
Step 11 Lift up the left end of spindle base unit in the direction of arrow (1), and then remove the unit in the direction of arrow (2).



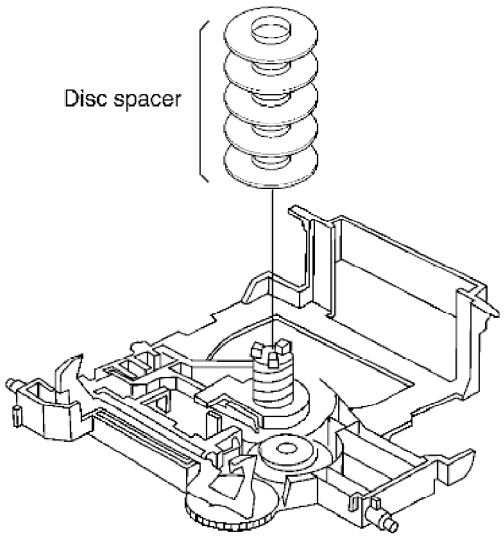
Step 12 Remove slide plate 1 and slide plate 2.



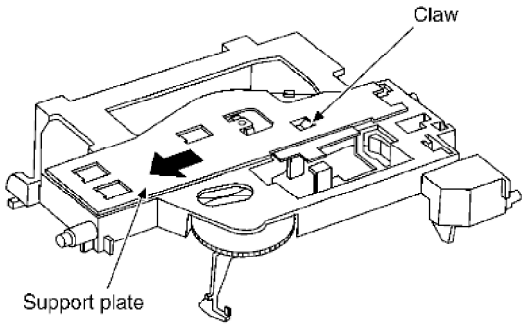
Step 13 Remove the traverse relay gear, traverse cam gear and drive gear.



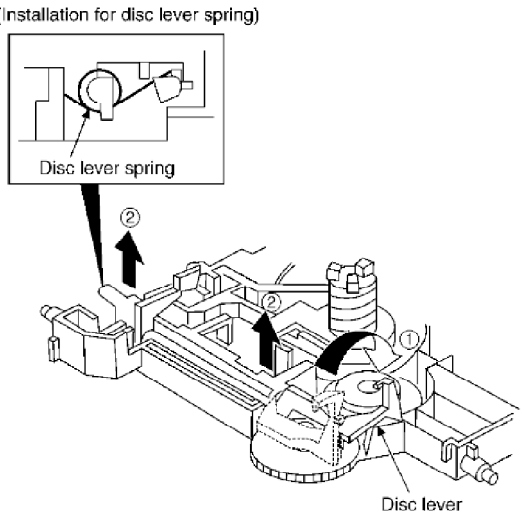
[Dissassembly/reassembly for the spindle base unit]
Step 1 Draw the 5 disc spacers.



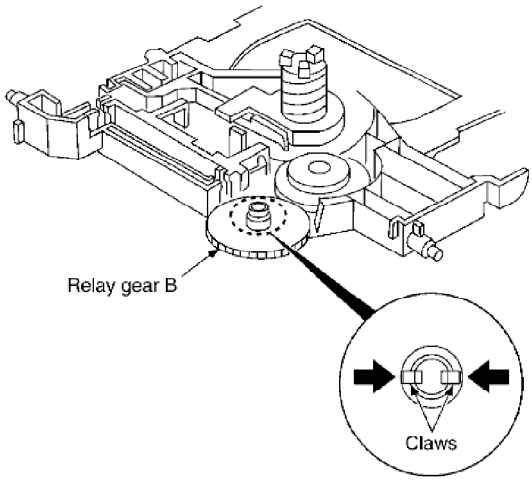
Step 2 Pushing the claw, slide the support plate in the direction of arrow, and then remove it.



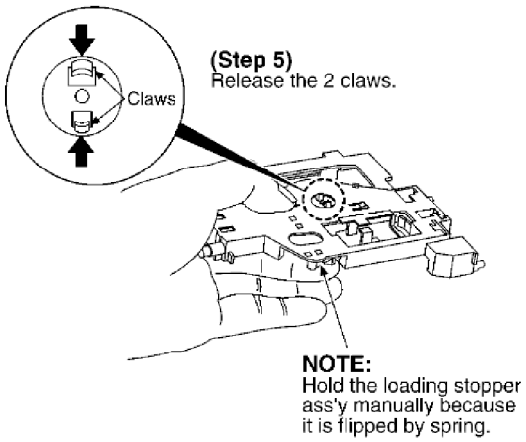
Step 3 Rotate the disc lever in the direction of arrow (1), draw the disc lever.



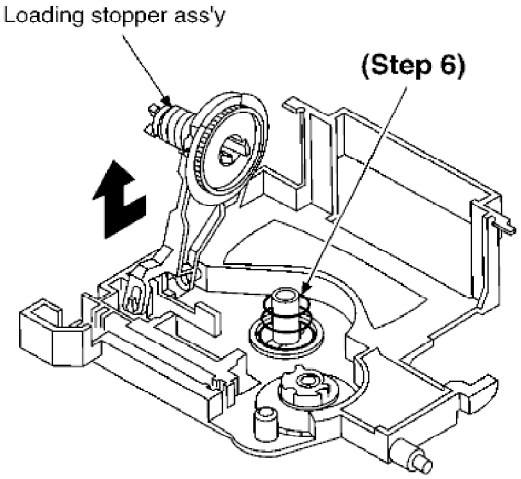
NOTE:
Take care not to lose the disc lever spring.



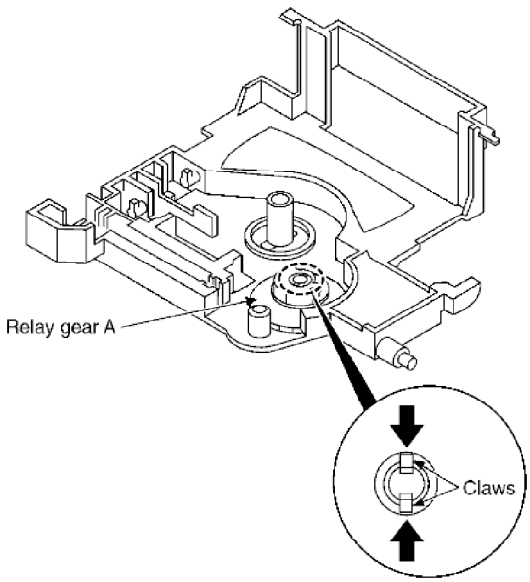
Step 4 Release the 2 claws, and then draw the relay gear B.
Step 5 Release the 2 claws as shown below.



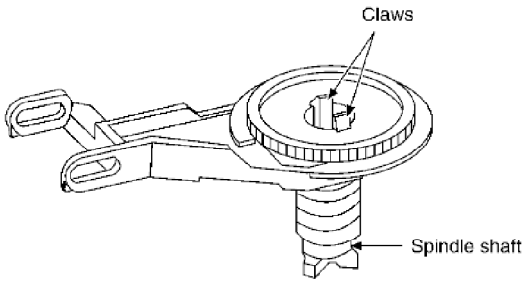
NOTE:
Hold the loading stopper ass'y manually bacause it is flipped by spring.



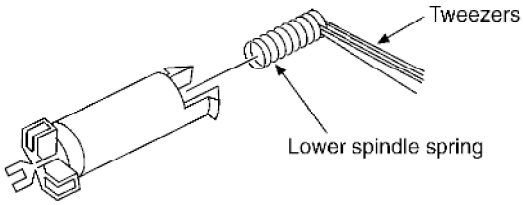
Step 6 Remove the cushion spring.
Step 7 Remove the loading stopper ass'y in the direction of arrow.



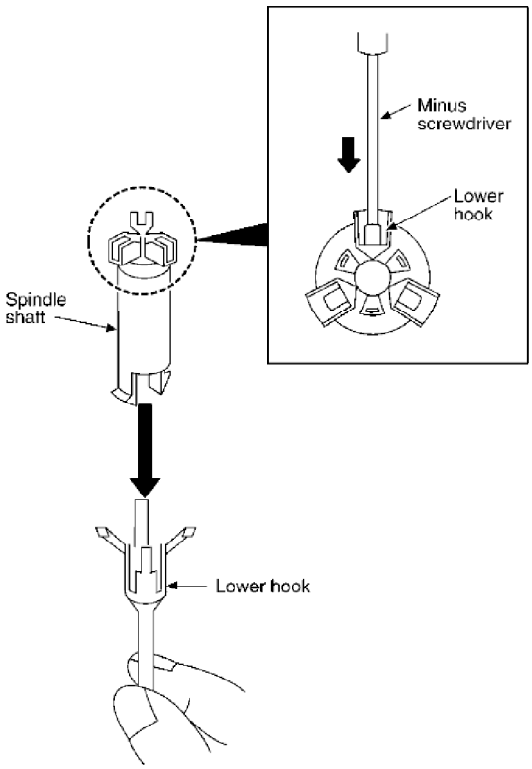
Step 8 Release the 2 claws, and then remove the relay gear A.
Step 9 Release the 2 claws, and then remove the spindle shaft.



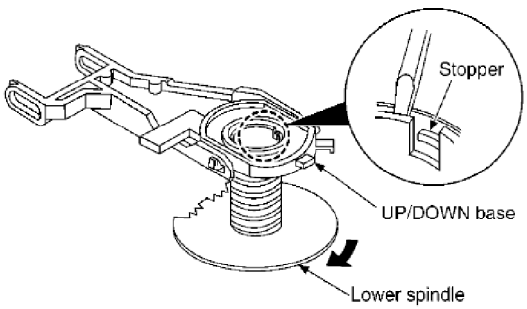
Step 10 Remove the lower spindle spring with tweezers.



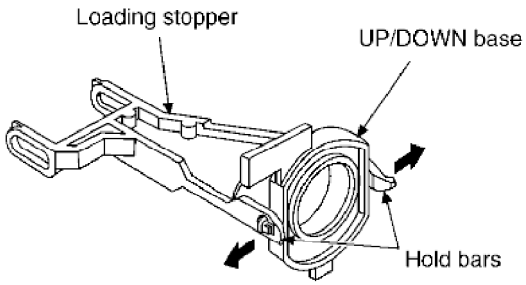
Step 11 Force the lower hook with thin tip of minus screwdriver.



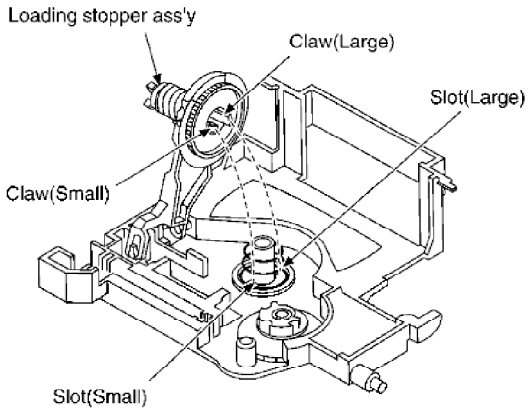
Step 12 Squeeze the shaft of lower hook, and then draw it.



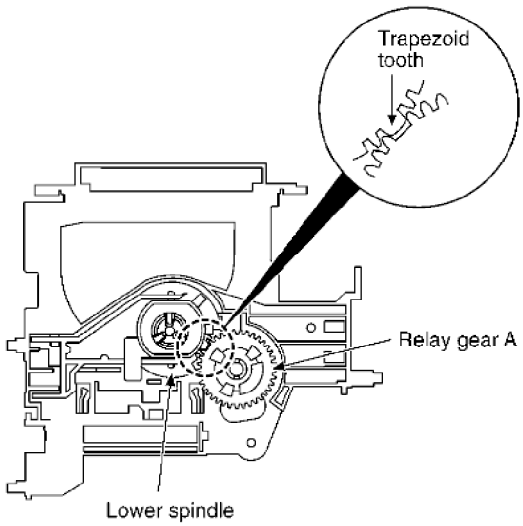
Step 13 Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.
Step 14 Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper. Then, rotate the lower spindle and remove it.



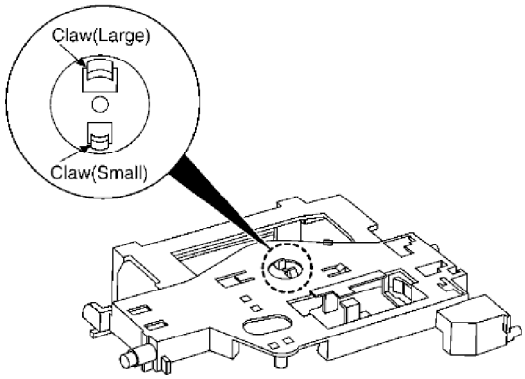
Step 15 Rotate the UP/DOWN base at a 90° angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.
[Installation for loading stopper ass'y]
Step 1 Align the claw of loading stoppers ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)



Step 2 Lower the loading stopper ass'y, and then align the lower spindle with the trapezoid tooth of relay gear A.



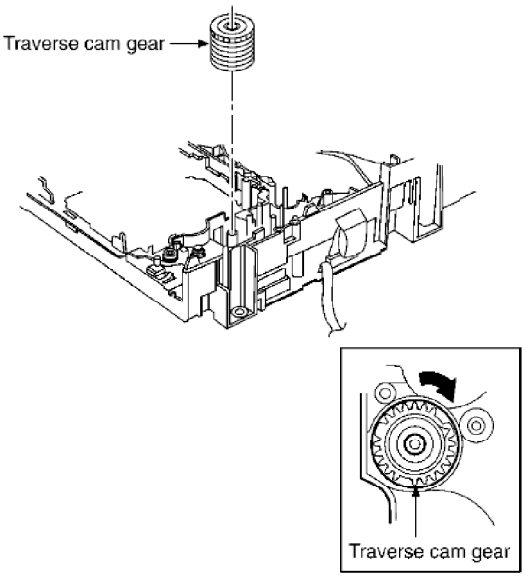
Step 3 Force the loading stopper ass'y, latch the claw firmly.



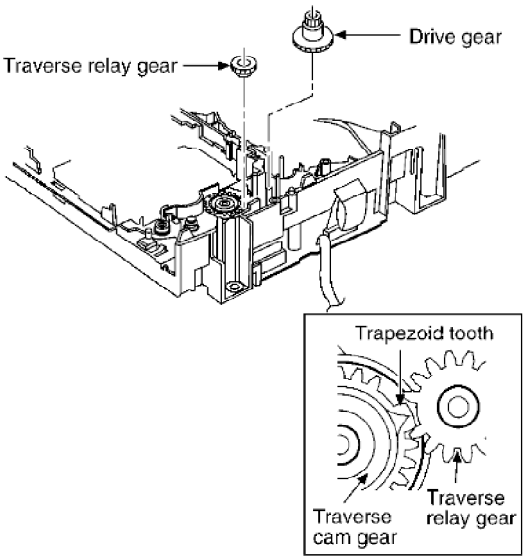
[Reassembly for mechanism base drive unit]

Step 1 Install the traverse cam gear.

Step 2 Rotate the traverse cam gear to the direction of arrow.

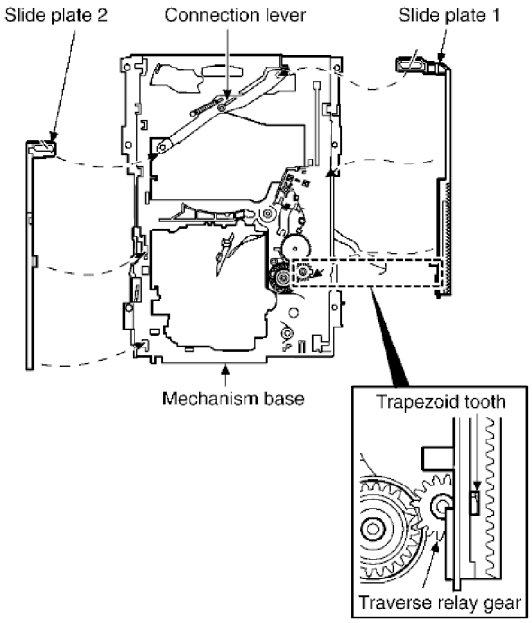


Step 3 Install the drive gear and traverse relay gear.

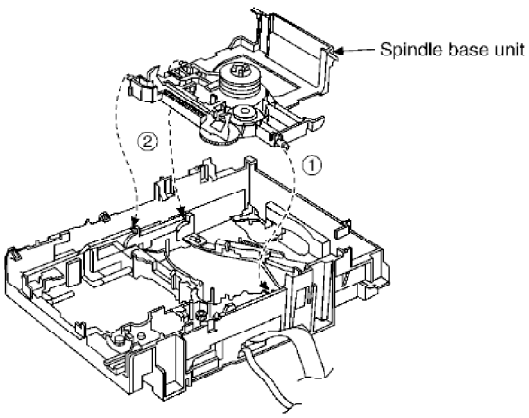


***When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of traverse**

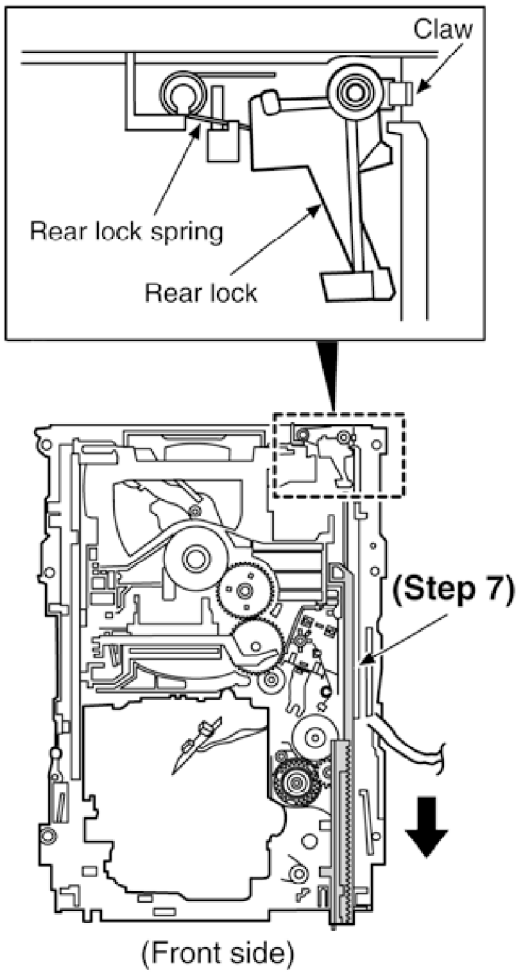
cam gear.



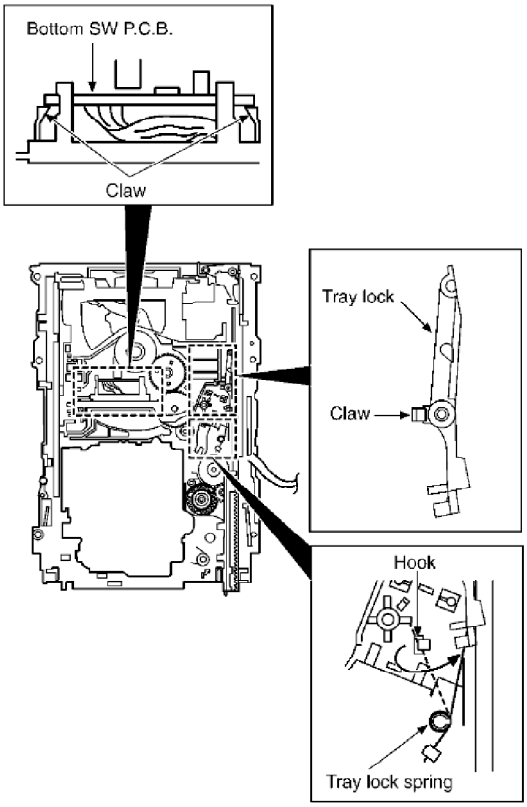
Step 4 Install the slide plate 2 to the mechanism base, and then match to the connection lever.
Step 5 Install the slide plate 1 to the mechanism base, and then match to the connection leve and align the trapezoid tooth of traverse relay gear with the slide plate 1.



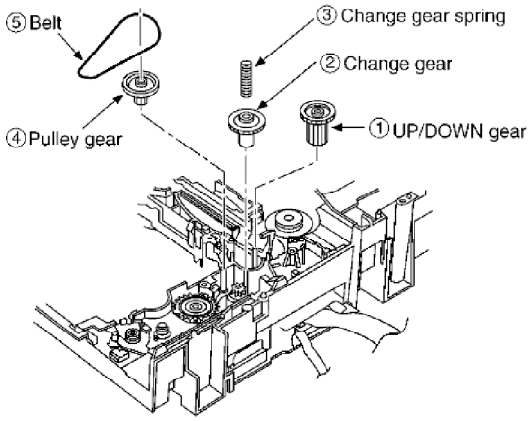
Step 6 Install the spindle base unit. (First, slide plate 1.)



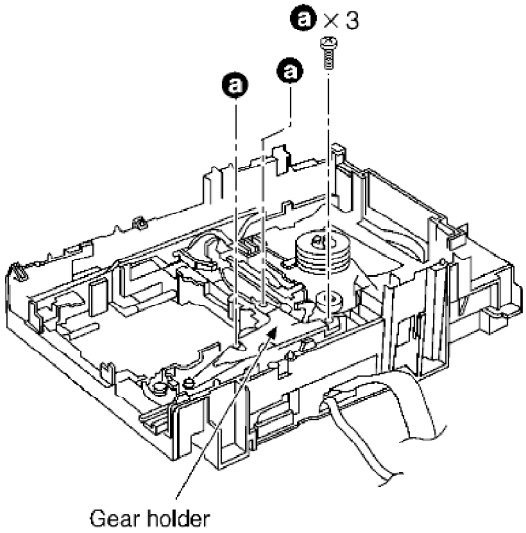
Step 7 Move the slide plate 1 to forward fully.
Step 8 Install the rear lock. (The claw should be latched.)
Step 9 Install the bottom SW P.C.B.. (The claw should be latched.)
Step 10 Install the tray lock. (The claw should be latched.)



Step 11 Remove the tray lock spring from hook,and then latch to the tray lock.
Step 12 Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of (1) - (5).



Step 13 Install the gear holder, and then tighten the screw (a).



Step 14 Install the tray base, traverse ass'y, mechanism cover and upper plate.
[Operation check after servicing]
Check the proper operation of following items with gear and hexagonal screwdriver.

1. Open/close of tray base.

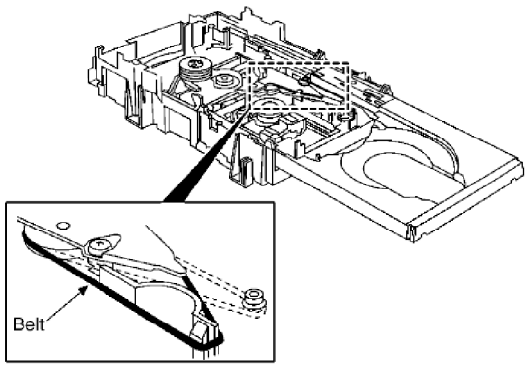
2. Moving the tray base to the stock side.

3. UP/DOWN operation of spindle base unit.

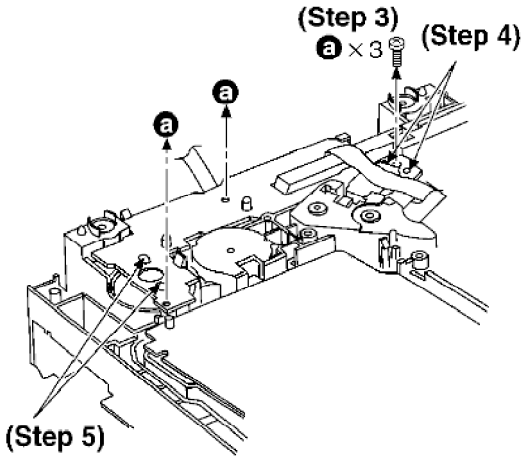
4. UP/DOWN operation of traverse ass'y.

8.7. Replacement for the motor ass'y

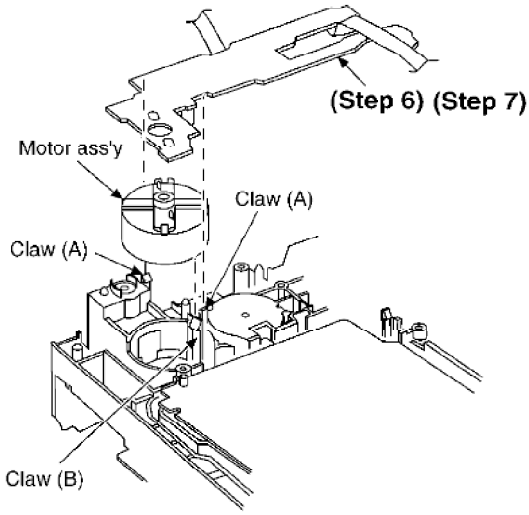
- Follow the (Step 1) - (Step 2) of Item 8.1.
- Follow the Disassembly for the CD Lid of Item 8.2.1.
- Follow the Disassembly for the CD changer unit of Item 8.2.2.
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 7) of Item 8.5



Step 1 Install the belt temporarily.
NOTE:
Take care not apply the grease to the belt.
Step 2 Upset the CD loading unit.
Step 3 Remove 3 screws.



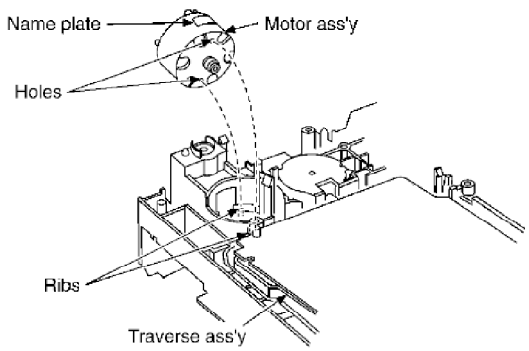
Step 4 Unsolder the plunger terminals (2 points).
Step 5 Unsolder the motor terminals (2 points).



Step 6 Release the 2 claws (A), and then remove the Motor P.C.B.
Step 7 Release the claw (B), and then remove the motor ass'y.
[Notice for motor ass'y installation]

1. Locate the name plate of motor to the traverse ass'y.

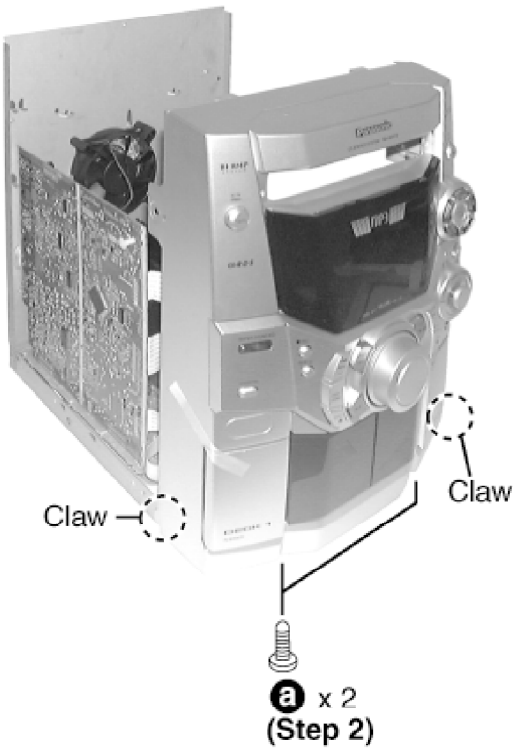
2. Align the hole of motor with the ribs.



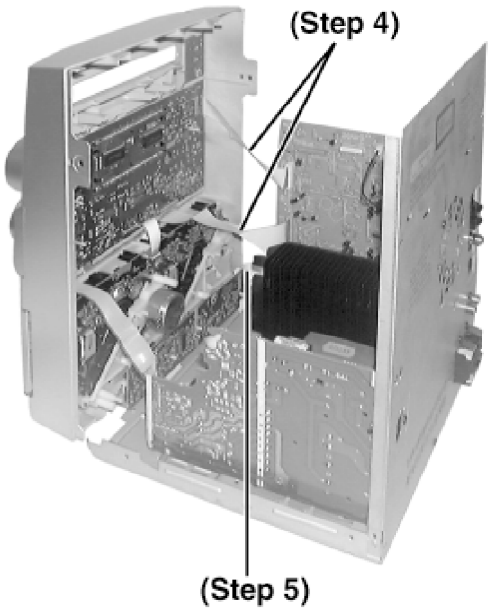
8.8. Replacement for the pinch roller ass'y and head block

- Follow the (Step 1) - (Step 2) of Item 8.1.
- Follow the Disassembly for the CD Lid of Item 8.2.1.
- Follow the Disassembly for the CD changer unit of Item 8.2.2.
- Follow the (Step 1) - (Step 14) of Item 8.6

Step 1 Remove the connector.

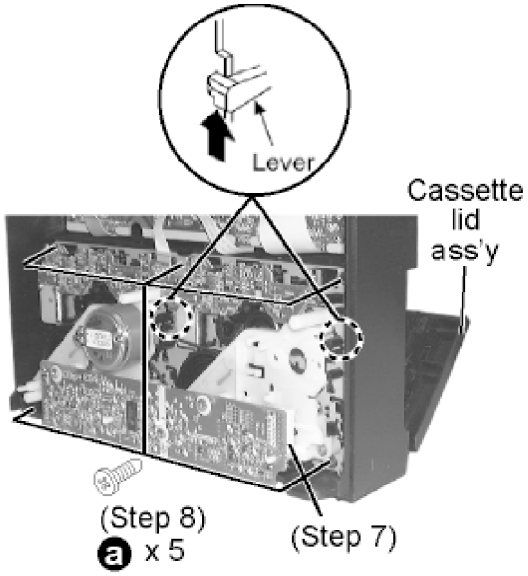


Step 2 Remove 2 screws.
Step 3 PUSH the 2 claws, and then draw the front panel ass'y.

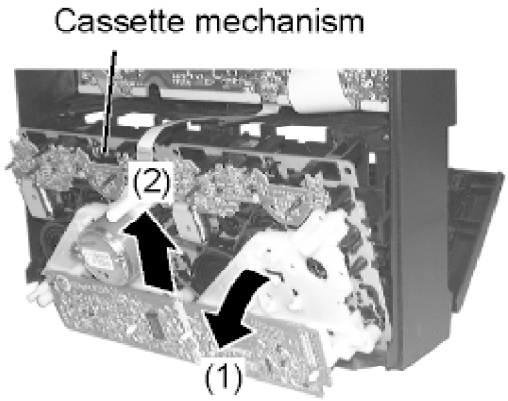


Step 4 Pull out the FFC.

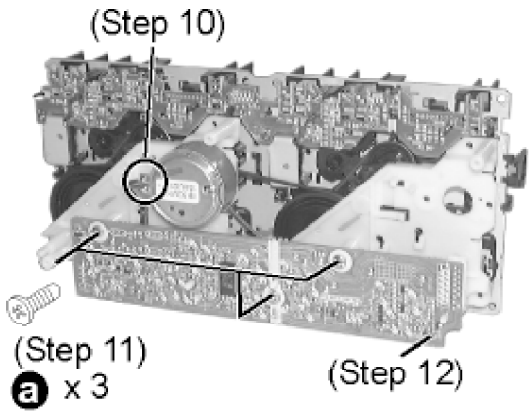
Step 5 Remove the flat cable from the connector.
Step 6 Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).



Step 7 Remove the flat cable from the connector (CN1001).
Step 8 Remove the 5 screw.

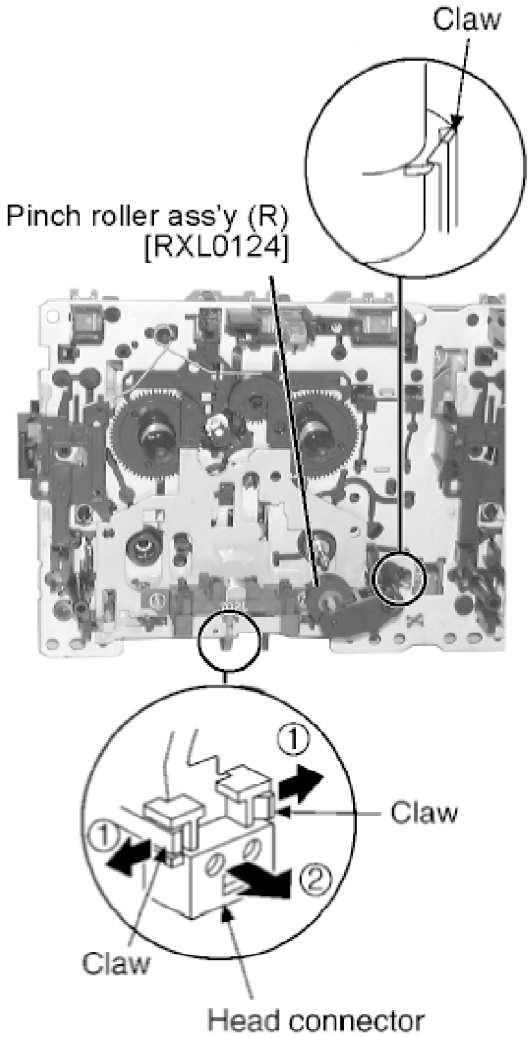


Step 9 Tilt the cassette mechanism in the direction of arrow (1), and then remove it in the direction of arrow (2).

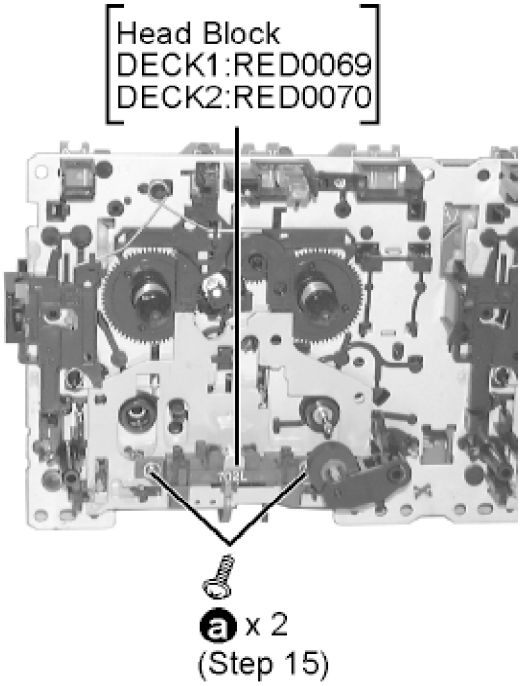


Step 10 Unsolder the motor terminals.
Step 11 Remove 4 screws.
Step 12 Remove mechanism Deck P.C.B.

*** The mechanism as shown below is for DECK1. For the one of DECK 2, perform the same procedures.**



Step 13 Release the 2 claws, and then remove the pinch roller (R), (F).
Step 14 Release the 2 claws, and then remove the head connector.

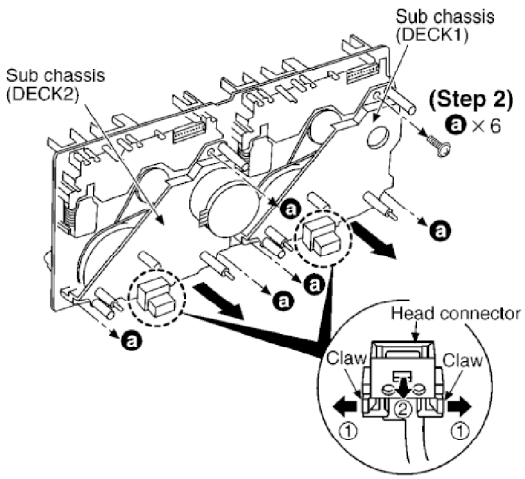


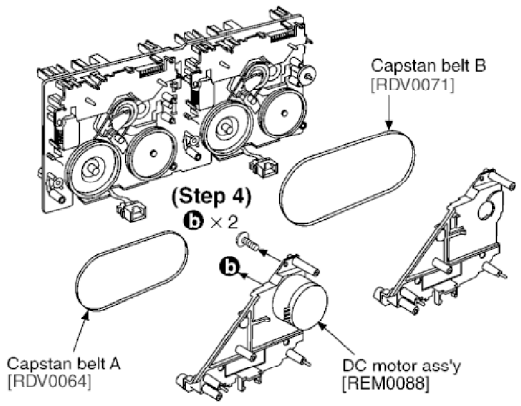
Step 15 Remove 2 screws.

8.9. Replacement for the CD motor ass'y, capstan belt A, capstan belt B and winding belt

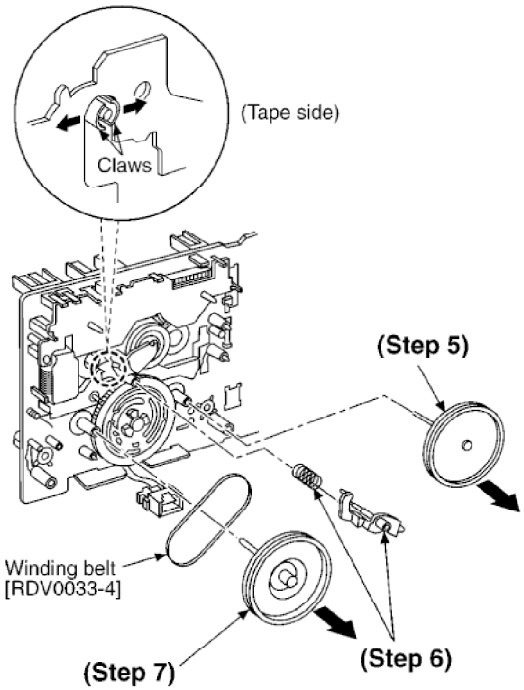
- Follow the (Step 1) - (Step 2) of Item 8.1.
- Follow the Disassembly for the CD Lid of Item 8.2.1.
- Follow the Disassembly for the CD changer unit of Item 8.2.2.
- Follow the (Step 1) - (Step 14) of Item 8.4
- Follow the (Step 1) - (Step 11) of Item 8.9

Step 1 Release the 2 claws, and then remove the head connector.
Step 2 Remove 6 screws.
Step 3 Remove the sub chassis.

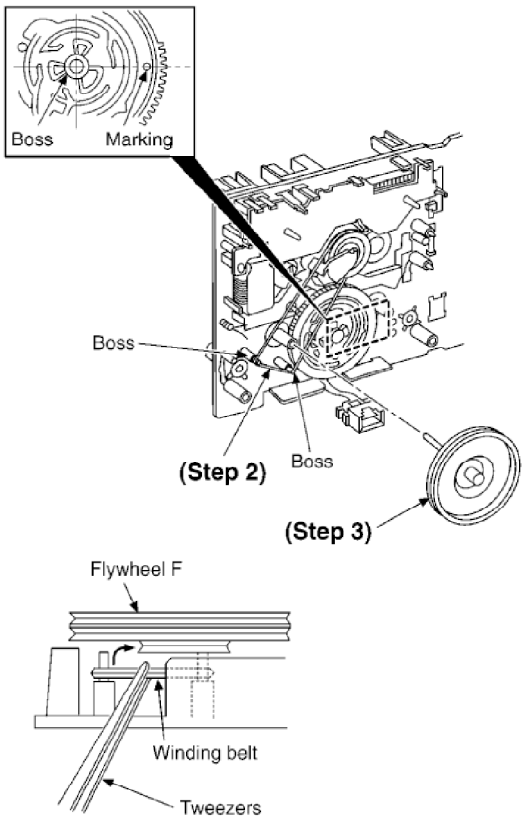




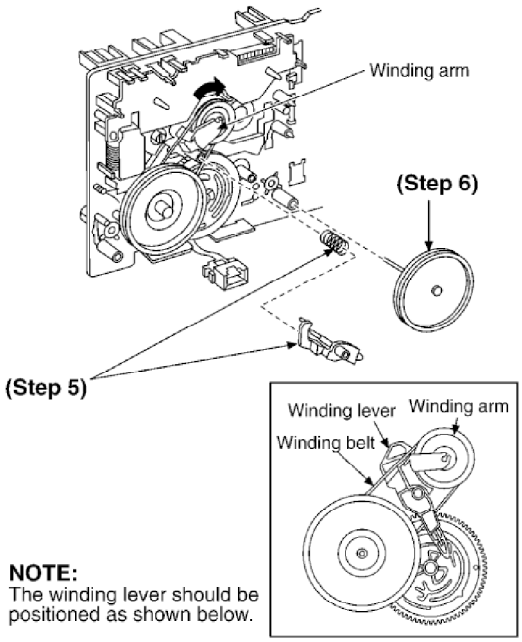
Step 4 Remove 2 screws.



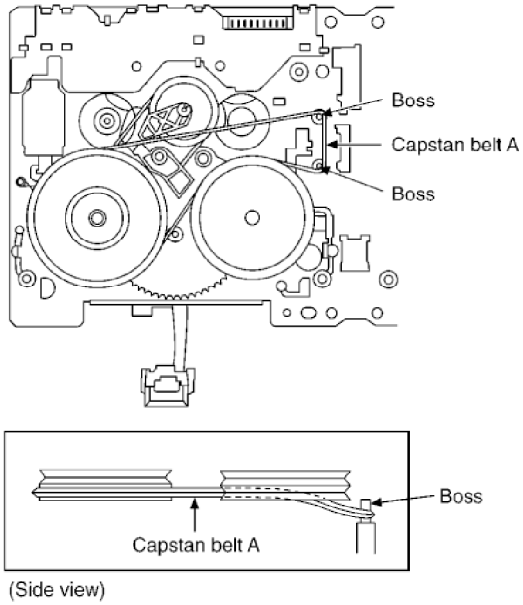
Step 5 Remove the flywheel R.
Step 6 Release the claw of tape side, and then remove the winding lever and spring.
Step 7 Remove the flywheel F.
[Installation of the belt]
Step 1 The boss and marking should be positioned horizontally.



Step 2 Put the winding belt on the pulley temporarily.
Step 3 Install the flywheel F.
Step 4 Put the winding belt on the flywheel F.
Step 5 Install the winding lever and spring while pressing the winding arm in the direction of arrow.
Step 6 Install the flywheel R.



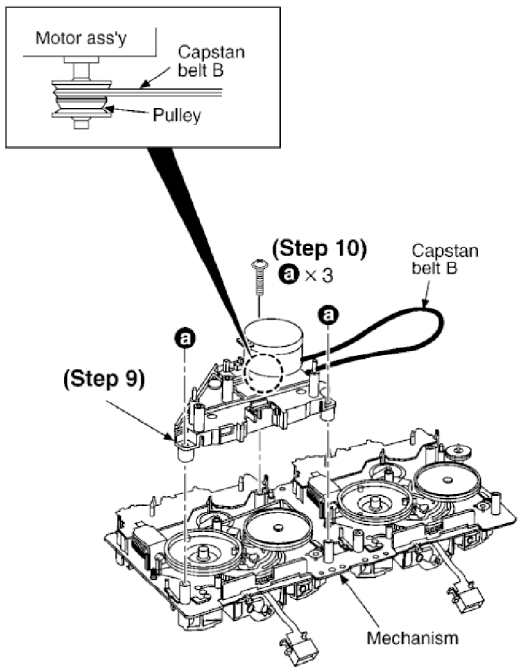
Step 7 Put the capstan belt A temporarily as shown below.



(Side view)

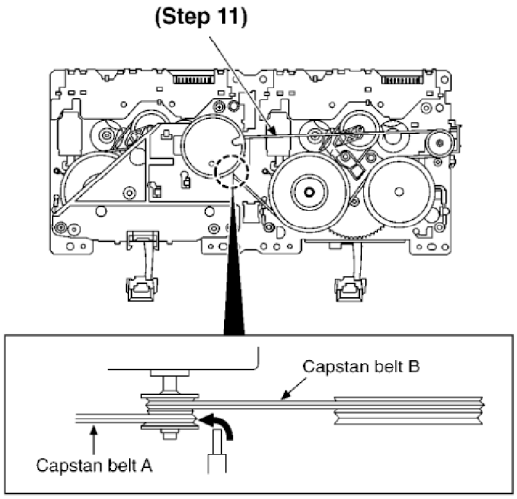
Step 8 Put the capstan belt B on the motor ass'y pulley.

Step 9 Install the sub chassis to the mechanism, and then tighten screws.



Step 10 Remove 3 screws.

Step 11 Put the capstan belt B as shown below.



Step 12 Put the capstan belt A on the motor ass'y pulley.

8.10. Replacement for the CD motor ass'y, capstan belt A, capstan belt B and winding belt

- Follow the (Step 1) - (Step 2) of Item 8.1.

- Follow the Disassembly for the CD Lid of Item 8.2.1.

- Follow the Disassembly for the CD changer unit of Item 8.2.2.

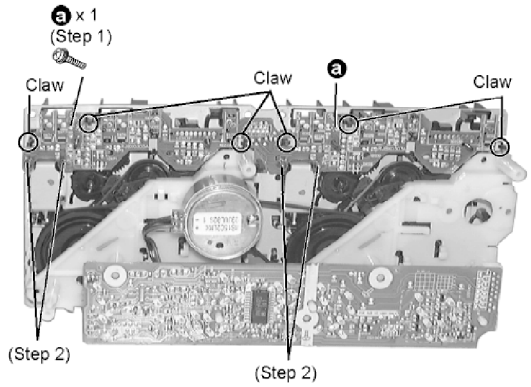
- Follow the (Step 1) - (Step 14) of Item 8.4

- Follow the (Step 1) - (Step 11) of Item 8.9

Step 1 Remove 2 screws.

Step 2 Unsolder the plunger terminals (2 points).

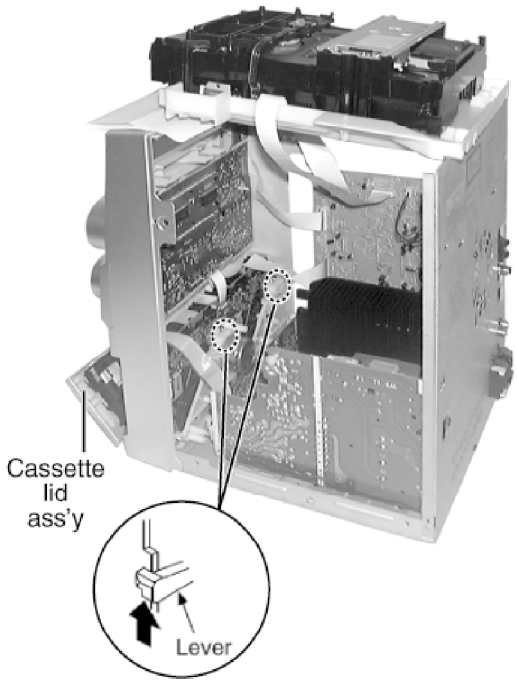
Step 3 Release the 3 claws, and then remove the mechanism P.C.B.



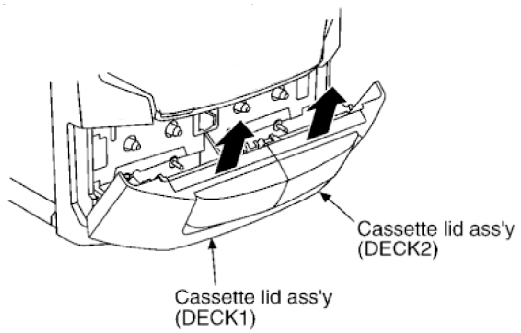
8.11. Replacement for the cassette lid ass'y

- Follow the (Step 1) - (Step 2) of Item 8.1.

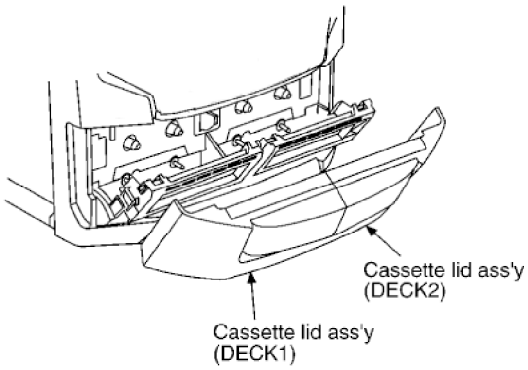
Step 1 Force the lever upward, open the cassette lid ass'y. (For DECK1 and DECK2)



Step 2 Lift up the cassette lid ass'y in the direction of arrow. (For DECK1 and DECK2).



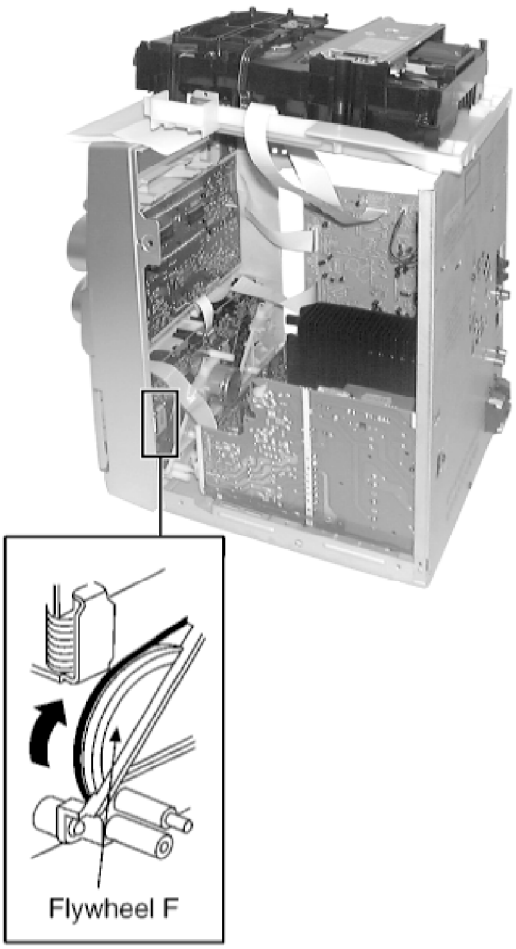
Step 3 Remove the cassette lid ass'y. (For DECK1 and DECK2).



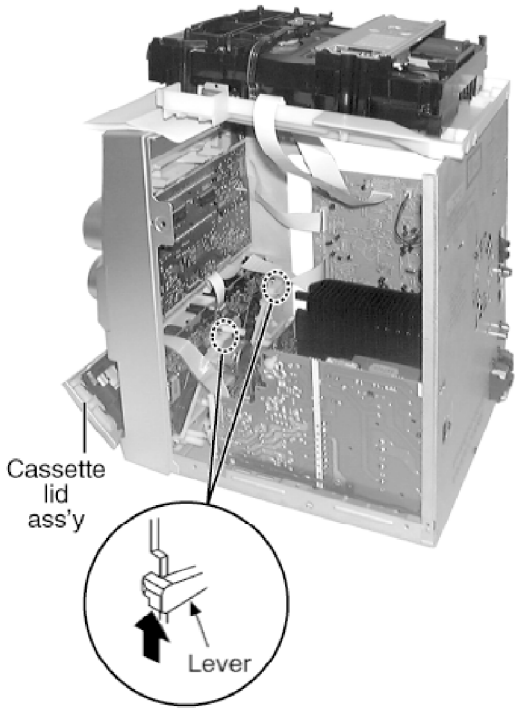
8.12. Measure for tape trouble

- Follow the (Step 1) - (Step 2) of Item 8.1.

Step 1 If a cassette tape cannot be removed from the deck since the tape is caught by the capstan or pinch roller during playback or recording, rotate the flywheel F in the direction of the arrow to remove the tape.



Step 2 Force the lever upward and open the cassette lid ass'y. Take the cassette tape off.



9. Precaution of Laser Diode

Caution :

This product utilizes a laser diode with the unit turned "ON", invisible laser radiation is emitted from the pick up lens. / Wavelength : 780 nm / Maximum output radiation power from pick up : 100 μ W/VDE / Laser radiation frompick up unit is safety level, but be sure the followings:

1. **Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.**
2. **Do not adjust the variable resistor on the pick up unit. It was already adjusted.**
3. **Do not look at the focus lens using optical instruments.**
4. **Recommend not to look at pick up lens for a long time.**

ACHTUNG :

Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt. / Wellenlänge : 780nm / Maximale Strahlungsleistung der Lasereinheit :100 μ W/VDE / DieStrahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. **Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.**
2. **Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.**
3. **Nicht mit optischen Instrumenten in die Fokussierlinse blicken.**
4. **Nicht über längere Zeit in die Fokussierlinse blicken.**

ADVARSEL: I dette a apparat anvendes laser.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THC SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ **Use of Caution Labels**

CAUTION	NV SIBLE LASER RAD ATION WHEN OPEN AVOID EXPOSURE TO BEAM. (EC60825-1)
ATTENTION	RADIATION LASER LORSQUE OUVERT. ÉVITER TOUTE EXPOS TION AU FAISCEAU.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR S KKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING
VARO!	AVATTAESSA JA SUOJALUKITUS OH TETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTE LYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	USYNL G LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONER NG FOR STRÅLEN
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN RQLXS0051

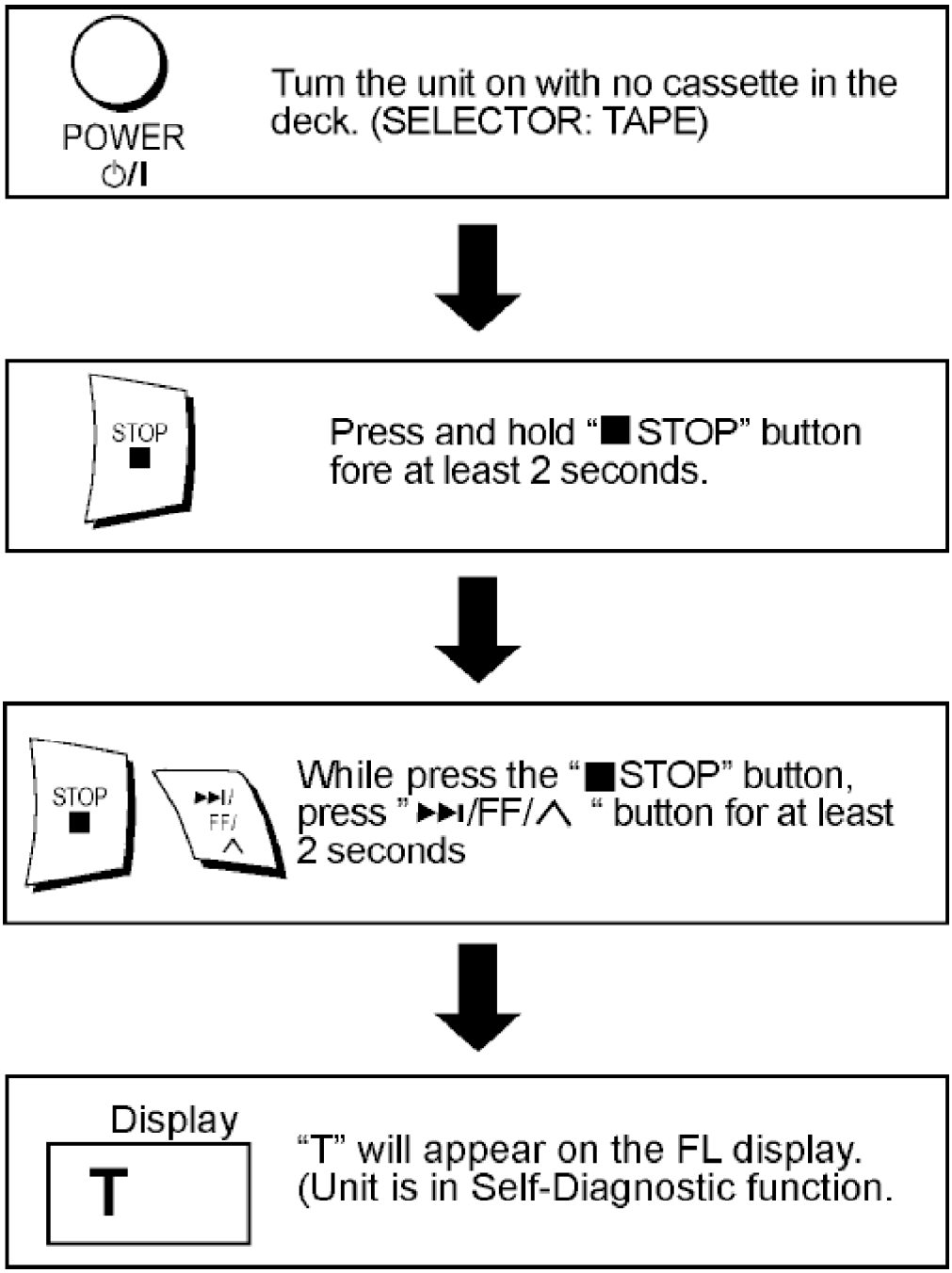
Inside of product

10. Self-Diagnostic Function

10.1. Self-diagnostic display

This unit is equipped with a self-diagnostic display function which, if a problem occurs, will display an error code corresponding to the problem.
Use this function when performing maintenance on the unit.

10.2. How to enter the Self-Diagnostic Function


POWER
Turn the unit on with no cassette in the deck. (SELECTOR: TAPE)
STOP
Press and hold "■STOP" button fore at least 2 seconds.
STOP
While press the "■STOP" button, press "▶▶I/FF/∧ " button for at least 2 seconds
Display
T
"T" will appear on the FL display. (Unit is in Self-Diagnostic function.

10.3. Cassette Mechanism Test (For error code H01, H02, H03, F01, F02)

1. **Press "TAPE, DECK 1/2" to select Deck 2.**
2. **Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.**
3. **Press "FAST FORWARD MEMORY" (Tape will be stop after 2 seconds)**

4. Load a cassette tape with the erasure prevention tab, remove from right side only and close the cassette holder.
5. Press “REVERSE FM MODE/BP” (Tape will be stop after 2 seconds)
6. Load a pre-recorded tape with both side record tabs intact and close the cassette holder.
7. Press “PLAY/TUNE/TIME ADJ UP” (After TPS function, tape will stop automatically)
8. Press “REC/STOP” (Tape will not move)
9. Press “STOP/TUNE MODE” to indicate Error code.

   - If several problem exist, error code will change each time when “ ■ /STOP” is pressed.
   (e.g. H01 → H03 → F01 .....etc.)

10. Press “TAPE, DECK 1/2” to select Deck 1.
11. Repeat step 2 to 9 to test Deck 1. (Tape Deck 1 will not check H02 because of no recording function)

10.4. CD Mechanism Test (F15, F26, F16, F17, F27, F28, F29, H15)

1. Press “CD”.
2. Press “OPEN/CLOSE (1)” and place a CD.
3. Press “OPEN/CLOSE (1)” to close the tray.
4. Press “OPEN/CLOSE (5)” and wait until the tray is open.
5. Press “OPEN/CLOSE (1)” and remove the CD.
6. Press “OPEN/CLOSE (1)” to close the tray.
7. Press “ ■ /STOP” to indicate Error Code.

   - If several problem exist, error code will change each time when “ ■ /STOP” is pressed. (e.g. F15 → F26 → F16 ....etc).

10.5. To clear all Error code

1. Press “STOP/TUNE MODE” button for 5 seconds.
2. FL indicator shows “CLEAR” for 1 second and change to “T”.

10.6. How to get out from Self-Diagnostic function

1. Press “Power” button OFF.

10.7. Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will indicate automatically.

11. Description of Error Code

11.1. Error detection for Cassette Mechanism block

NO.	Error	Error Display	Problem condition
1	MODE SW detection error	H01	Faulty operation of cassette mechanism. Faulty contact or short-circuit of mechanism moc switch (S951, S971).
2	REC INH SW detection error	H02	Recording not possible. Faulty contact or short-circuit of REC INH switch
3	HALF SW detection error	H03	Playback cannot perform. Faulty contact or short-circuit of HALF switch (S S972).
4	Reel Pulse detection error	H04	The tape advances slightly and then stops. Faulty reel pulse, faulty hole detect IC (IC951, IC9
5	TPS abnormal	F02	Cassette deck will not perform TPS function. Faulty playback EQ/recording amplifier IC (IC1001

11.2. Error detection for CD Changer block

NO.	Error	Error Display	Problem condition
1	REST SW detection error	F15	CD does not function. This error occurs when the Optical Pick Up REST (S701) is not detected within the specified time (about 8 secor
2	CD tray opens automatically	F16	CLAMP switch (SW4) NG (Check & Replace)
3	Does not startup when [PLAY] button is pressed	F17	BOTTOM switch (SW5) NG (Check & Replace)
4	Transmission error between CD servo LSI and micon	F26	CD does not function. This error occurs when the POWER is ON for the block and an error is detected after the transmission has started.
5	Startup fails even when you insert CD or the selected disc tray does not open	F27	Tray 1 detect switch or Tray 2 detect NG (Check Replace)
6	Cannot insert CD	F28	Tray 1 detect switch NG (Check & Replace)
7	Cannot eject CD	F29	Check if disc is stuck. Tray 2 detect switch NG (Confirm & Replace)
8	The CD tray closes	H15	CD disc tray detect switch NG (SW3) (check & Re

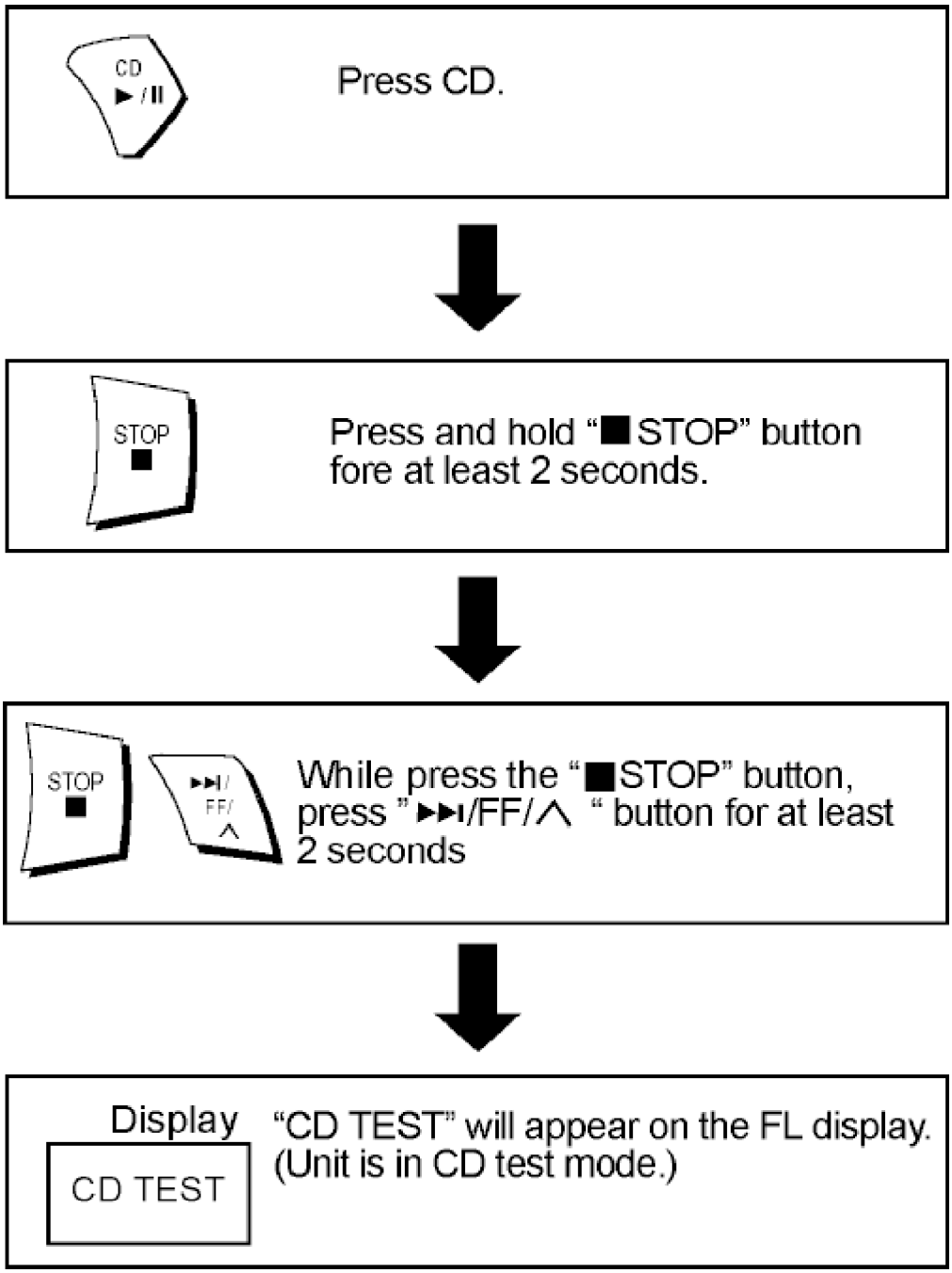
11.3. Power Supply related error detection

NO	Error	Error Display	Problem condition
1	POWER AMP output abnormal	F61	When POWER is switched on, power become off automatically. During normal operation, if DC DET become L, PC shall become L and the error display on the left shall be display (IC501)

12. CD Test Mode Function

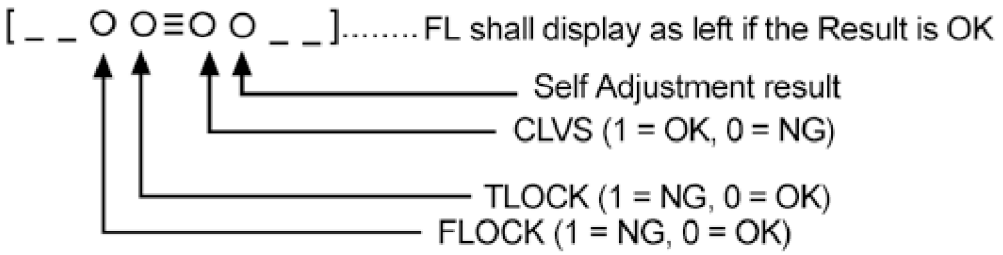
This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

12.1. How to set CD test mode


CD
▶/II
Press CD.
STOP
Press and hold "■STOP" button fore at least 2 seconds.
STOP
▶▶I/
FF/
While press the "■STOP" button, press "▶▶I/FF/∧ " button for at least 2 seconds
Display
CD TEST
"CD TEST" will appear on the FL display. (Unit is in CD test mode.)

12.2. CD Automatically Adjustment result indication

Under CD test mode, pressing the numeric key '0' on the remote controller will display the auto adjustment result. FLOCK, TLOCK and CLVS status shall be shown as below:



During the above display, executing CD PLAY will display auto adjustment result for CD PLAY mode.

13. Measurements and Adjustments

13.1. Cassette Deck Section

- Measurement Condition
- Make sure head, capstan and press roller are clean.
- Judgeable room temperature 20 ± 5 °C (68 ± 9°F)
- Measuring instrument
- EVM (DC Electronic volmeter)
- Digital fruency counter
- Test Tape
- Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

13.1.1. Tape Speed Adjustment (Deck 1/2)

1. Set the tape edit button to “NORMAL” position.

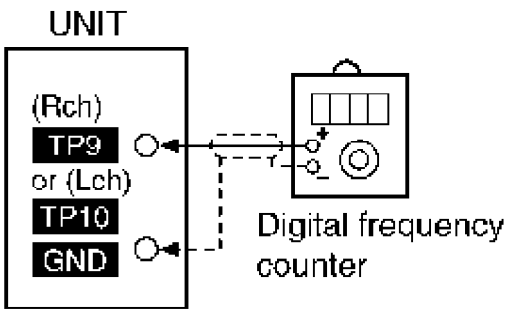
2. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.

3. Adjust Motor VR (DECK 2) for the output value shown below.

Adjustment target: 2940 ~ 3060 Hz (NORMAL speed)

4. After alignment, assure that the output frequency of the DECK 1 FWD are within ±60 Hz of the value of the output frequency of DECK 2 FWD.

Fig. 1



13.1.2. Bias and Erase Voltage Check

1. Set the unit “AUX” position.

2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to

"REC" mode (use " ● REC/STOP" key).

3. **Measure and make sure that the output is within the standard value.**

Bias voltage for Deck 2	**14±4mV (Normal)**
Erase voltage for Deck 2	**80mV (Normal)**

Fig. 2

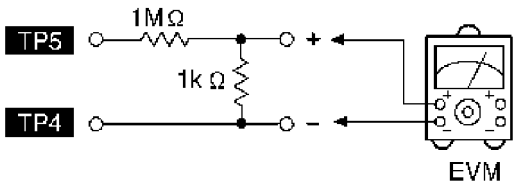
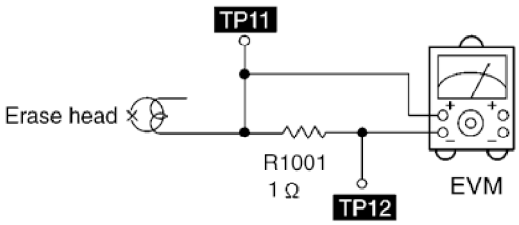


Fig. 3

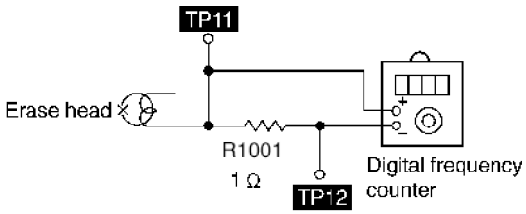


13.1.3. Bias Frequency Adjustment (Deck 1/2)

1. **Set the unit to "AUX" position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to "REC" mode (● use "REC/STOP" key).**
3. **Adjust L1002 so that the output frequency is within the standard value.**

Standard Value: 97 ±8 kHz

Fig. 4



13.2. Tuner Section

13.2.1. AM-IF Alignment

1. **Connect the instrument as shown in Fig.5.**

2. Set the unit to AM mode.

3. Apply signal as shown in Fig. 5 from AM-SG.

4. Adjust Z102 so that the output frequency is maximized in Fig. 6.

Fig. 5

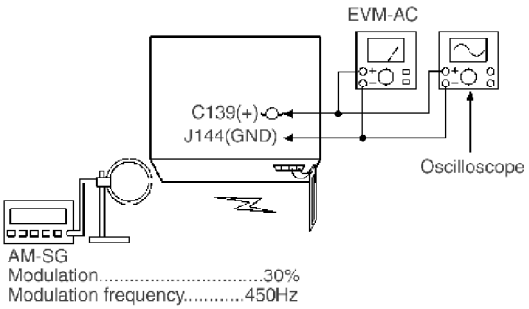
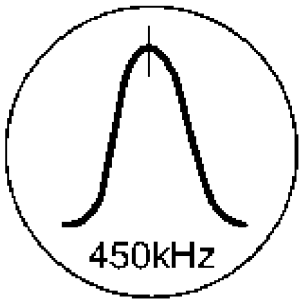


Fig. 6



13.2.2. AM RF Adjustment

1. Connect the instrument as shown in Fig. 7.

2. Set the unit to AM mode.

3. Set AM-SG to 520kHz.

4. Receive 520kHz in the unit.

5. Adjust Z101 (OSC) so that the EVM-AC is maximized.

6. Set AM-SG to 600Hz.

7. Receive 600Hz in the unit.

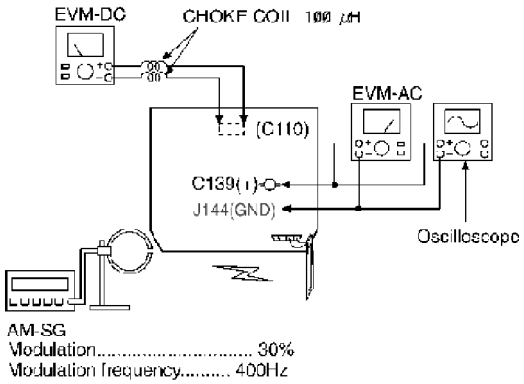
8. Adjust Z101 (ANT) so that the EVM-SG is maximized.

9. Set AM-SG to 520kHz.

10. Receive 520kHz in the unit.

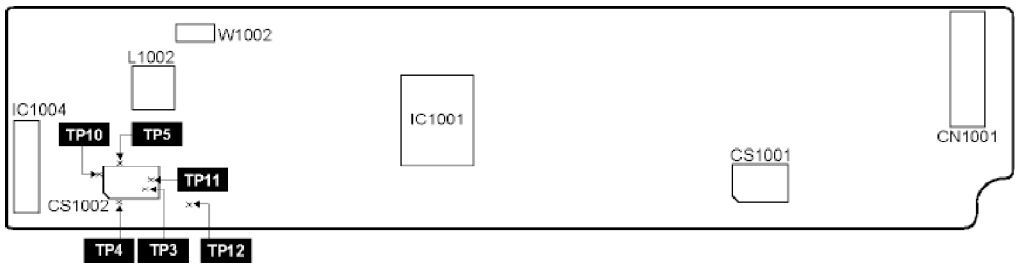
11. Adjust Z101 (OSC) so that the EVM-DC value is with 1.1±0.5V.

Fig. 7

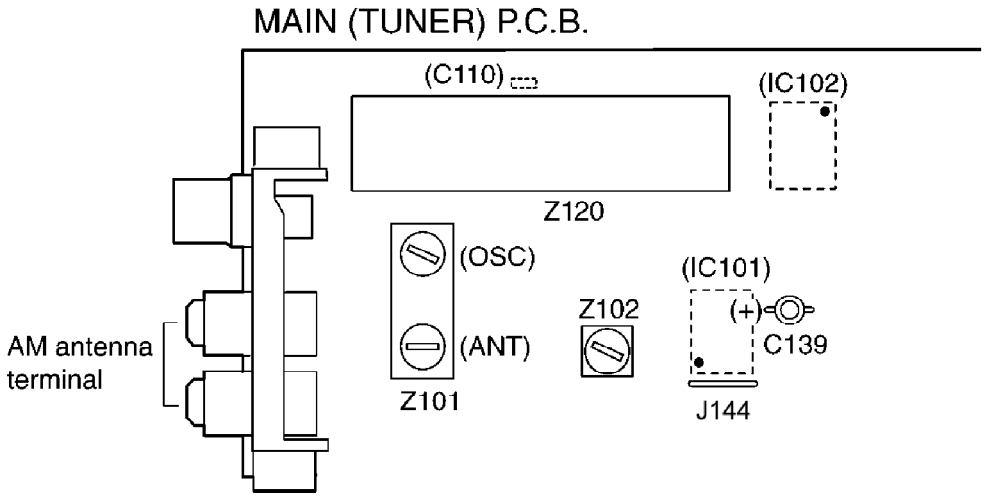


13.3. Alignment Points

13.3.1. Cassette Deck Section



13.3.2. Adjustment Point



14. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

SW1

: Push switch

SW2

: Push switch

SW3
: Switch

SW4
: CD switch

SW5
: Lock switch

S601
: Power switch

S602
: Preset EQ switch

S603
: Deck 1/2 switch

S604
: Rec switch

S605
: CD Open/ Close switch

S606
: CD 1 switch

S607
: CD 2 switch

S608
: CD 3 switch

S609
: CD 4 switch

S610
: CD 5 switch

S612
: SSEQ switch

S613
: Subwoofer switch

S614
: Up switch

S615
: Right switch

S616
: Down switch

S617
: Left switch

S618
: Title Search switch

S619
: Enter switch

S620
: Marker switch

S621
: Delete switch

S701
: Reset switch

S901
: REW switch

S902
: Tuner switch

S903
: CD Play switch

S904
: FF switch

S905
: Stop switch

S906
: Deck 2 Open switch

S907
: Tape switch

S908
: AUX switch

S909

: Deck 1 Open switch

S910

: Display switch

S951

: Mode switch

S952

: Half switch

S971

: Mode switch

S972

: Half switch

S975

: RECINH-F switch

VR600

: Volume Jog

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveformsdependingupon the internal impedance of the tester or the measuring unit.

No mark : Playback << >> : Rec < > : FM (( )) : CD

- Importance safety notice :

Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. Whenreplacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

15. Printed Circuit Board

Note: Circuit board diagrams may be modified at any time with the development of new technology.

16. Block Diagram

17. Wiring Connection Diagram

18. Illustration of IC's, Transistors and Diodes

19. Terminal Function of IC's

19.1. IC701 (AN8885SBE1) Servo Amplifier

Pin No.	Mark	I/O	Function
1	PDE	I	Tracking signal input 1
2	PDF	I	Tracking signal input 2
3	VCC	I	Power supply
4	PDA	I	Focus signal input terminal 1
5	PDB	I	Focus signal input terminal 2
6	LPD	I	APC amp input
7	LD	O	APC amp output
8	RF	O	RF summing output
9	RFIN	I	Detector's input
10	CSBRT	I	Capacitor for OFTR connection
11	CEA	I	Capacitor for HPF amp connection
12	BDO	O	BDO output ("H" : drop out)
13	LDON	I	APC control
14	GND	-	Ground

Pin No.	Mark	I/O	Function
15	/RFDET	O	NRFDET output (“L” : detection)
16	PDOWN	O	Power-down input
17	OFTR	O	OFTR
18	NC	O	N.C.
19	ENV	O	3T-ENV output
20	NC	I	N.C.
21	NC	I	N.C.
22	TEN	I	TE amp input
23	TEOUT	O	TE amp output
24	FEOUT	O	FE amp output
25	FEN	I	FE amp input
26	VREF	O	Reference voltage
27	TBAL	I	Tracking balance control
28	FBAL	I	Focus balance control

19.2. IC702 (MN6627911AC1) Servo processor/ Digital signal processor/ Digital filter/ D/A converter

Pin No.	Mark	I/O	Function
1	DRVDD	I	Power supply for DRAM interface (Pin 2 to 19 and 80)
2	D0	I/O	DRAM data I/O signal 0
3	D1	I/O	DRAM data I/O signal 1
4	NWE	O	DRAM write enable signal
5	NRAS	O	DRAM RAS control signal
6	D2	I/O	DRAM data I/O signal 2
7	D3	I/O	DRAM data I/O signal 3
8	NCAS0	O	DRAM CAS control signal 0
9	A10	O	DRAM CAS control signal 10
10	A8	O	DRAM address signal 8
11	A7	O	DRAM address signal 7
12	A6	O	DRAM address signal 6

Pin No.	Mark	I/O	Function
13	A5	O	DRAM address signal 5
14	A4	O	DRAM address signal 4
15	A9	O	DRAM address signal 9
16	A0	O	DRAM address signal 0
17	A1	O	DRAM address signal 1
18	A2	O	DRAM address signal 2
19	A3	O	DRAM address signal 3
20	DVSS2	I	Ground for digital circuits
21	DVDD2	I	Power supply for digital circuits
22	SPOUT	O	Spinlde motor drive signal output (absolute value output)
23	TRVP	O	Traverse drive output (positive polarity output)
24	TRVM	O	Traverse drive output (negative polarity output)
25	TRP	O	Tracking drive output (positive polarity output)
26	TRM	O	Tracking drive output (negative polarity output)
27	FOP	O	Focus drive output (positive polarity output)
28	FOM	O	Focus drive output (negative polarity output)
29	IOVDD1	I	Power supply for I/O
30	TBAL	O	Tracking balance adjustment output
31	FBAL	O	Focus balance adjustment output
32	FE	I	Focus error signal input (analog input)

Pin No.	Mark	I/O	Function
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input (analog input)
35	OFT	I	Off-track signal input High : Off track)
36	NRFDET	I	RF detection signal input Low :detection)
37	BDO	I	Dropout signal input High: Dropout
38	LDON	O	Laser ON signal output High: ON
39	ARF	I	RF signal input
40	IREF	I	Reference current input
41	ADPVCC	I	Voltage input for supply voltage monitor (analog input)
42	DSLF	O	DSL loop filter
43	RFSW	I	DSL loop filter
44	PLLF	O	PLL loop filter
45	PLLFO	O	PLL loop filter
46	AVDD2	I	Power supply for analog circuits (for DSL, PLL and A/D)
47	AVSS2	I	Ground for analog circuits (for DSL, PLL and A/D)
48	OUTL	O	L-ch audio output
49	AVSS1	I	Ground for analog circuits (for audio output stage)
50	OUTR	O	R-ch audio output
51	AVDD1	I	Power supply for analog circuits (for audio output stage)
52	DVSS3	I	Ground for digital circuits
53	DVDD3	I	Power supply for digital circuit
54	TMOD2	I	Test input pin Low: Normal
55	FLAG	O	Flag signal output
56	EXT2	I/O	Expansion I/O port 2
57	EXT0	I/O	Expansion I/O port 0
58	EXT1	I/O	Expansion I/O port 1
59	IOVDD2	I	Power supply for I/O

Pin No.	Mark	I/O	Function
60	TX	O	Digital audio interface output signal
61	MCLK	I	Microcontroller command clock signal input (Latches data at the rising adge)
62	MDATA	I	Microcontroller command data signal input
63	MLD	I	Microcontroller command load signal input Low: Load
64	BLKCK	O	Subcode block clock signal (f=75 Hz in normal-speed playback mode)
65	PWMSEL	I	PWM output mode selection input Low: Direct High: 3-state
66	SMCK	O	4.2336 MHz/ 8.4672 MHz clock signal output
67	SBCK	I	Clock input for subcode serial output
68	STAT	O	Status signal output
69	NRST	I	Reset input Low: Reset
70	SPPOL	O	Spindle motor drive signal output (polarity output)
71	PMCK	O	88.2-kHz clock signal output
72	DQSY	O	Pack signal output for CD-TEXT data
73	TXTD	O	CD-TEXT data signal output
74	TXTCK	O	External clock signal input for CD-TEXT register
75	NTEST	I	Test input pin High: Normal
76	OUT X2	O	Crystal oscillator circuit output pin (f= 16.9355 MHz, 33.8688 MHz)

Pin No.	Mark	I/O	Function
77	IN X1	I	Crystal oscillator circuit input pin (f= 16.9344 MHz, 33.8688 MHz)
78	DVSS1	I	Ground for digital circuits
79	DVDD1	I	Power supply for digital circuits
80	MON	O	Monitor for evaluation

19.3. IC703 (AN8739SBTE2) Focus coil/ Tracking coil/ Traverse motor/ Spindle motor driver

Pin No.	Mark	I/O	Function
1	/RST	-	RESET output terminal
2	NC	-	N.C.
3	IN2	I	Motor drive (2) input
4	PC2	I	Turntable motor drive signal (“L” :ON)
5	NC	-	N.C.
6	IN1	I	Motor driver (1) input
7	NC	I	N.C.
8	PVCC1	I	Power supply (1) for driver
9	PGND1	-	Ground connection (1) for driver
10	NC	-	N.C.
11	D1-	O	Motor driver (1) reverse-action output
12	D1+	O	Motor driver (1) forward-action output
13	D2-	O	Motor driver (2) reverse-action output
14	D2+	O	Motor driver (2) forward-action output
15	D3-	O	Motor driver (3) reverse-action output
16	D3+	O	Crystal oscillating circuit input (f = 16.9344MHz)
17	D4-	O	Motor driver (4) reverse-action output
18	D4+	O	Motor driver (4) forward-action output
19	NC	-	N.C.

Pin No.	Mark	I/O	Function
20	PGND2	-	Ground connection (2) for driver
21	PVCC2	I	Power supply (2) for driver
22	NC	-	N.C.
23	VCC	I	Power supply terminal
24	VREF	I	Reference voltage input
25	IN4	I	Motor driver (4) input
26	IN3	I	Motor driver (3) input
27	RSTIN	I	Reset terminal
28	NC	-	N.C.
29	Gnd	-	Gnd
30	Gnd	-	Gnd

19.4. IC305 (C2CBJF000006) System Microprocessor

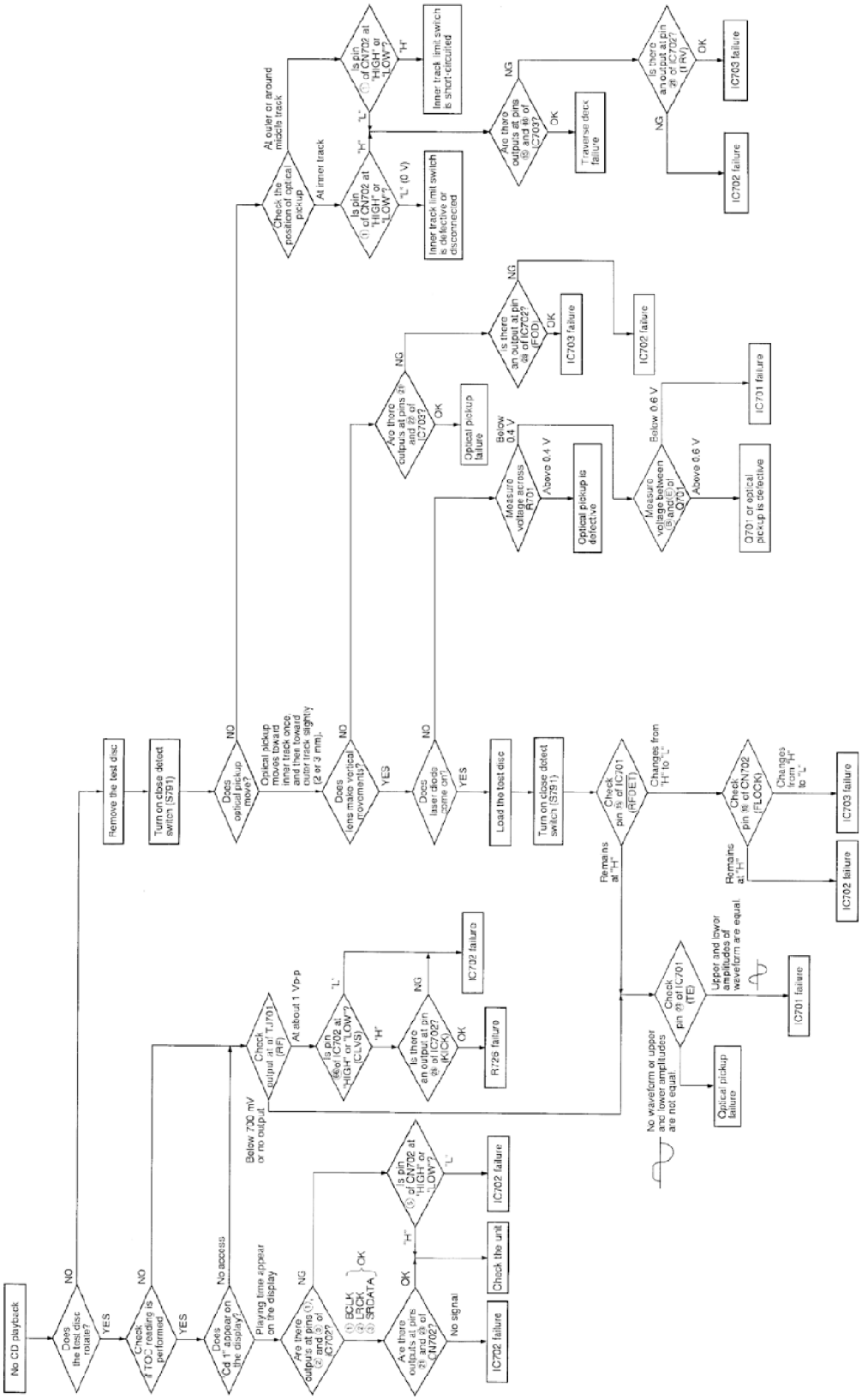
Pin No.	Mark	I/O	Function
1	REG_2	I/O AD	Region Setting 2
2	PLLCK	O	Tuner PLL Clock Output
3	PLLDA	O	Tuner PLL Data Output
4	ST/DO	I	Tuner IF Data / Stereo Input
5	SD	I	Tuner signal Detect Input
6	MBP1	O	Mircrocomputer Beat Proof Output 1 (CONTROL)
7	MBP2	O	Microcomputer Beat Proof Output 2 (CONTROL)
8	BYTE	-	External Data Bus Width Select Input (Connect to Ground)
9	CNVss/ EFP_PGM/ OE/MD	-	Flash Mode Terminal (Connected To Ground)
10	XCIN	-	32.768 kHz Sub Clock
11	XCOUT	-	32.768 kHz Sub Clock
12	/RESET EFP_RESET	-	Reset Input (ACTIVE L)
13	XOUT	-	10 MHz Main Clock
14	Vss	-	Ground (0V)

Pin No.	Mark	I/O	Function
15	XIN	-	10 MHz Main Clock
16	Vcc	-	Power Supply (+5V)
17	/NMI	-	Connect to Vcc (+5V)
18	RMT	I	Remote Control Input
19	BLKCK	I	CD Block Clock Input (Inverted)
20	SYNC	I	AC Failure Detect Input
21	MUTE_H	O	HIC Mute
22	ECHO_CTL1	O	Echo Control 1
23	ECHO_CTL2	O	Echo Control 2
24	ECHO_CTL3	O	Echo Control 3
25	ECHO_MU	O	Echo MUTE
26	ASP_DAT	O	ASP DATA
27	ASP_CLK	O	ASP CLOCK
28	SUR_ON	O	SURROUND ON / OFF
29	SW_LVL1	O	Sub Woofer Level 1
30	SW_LVL2	O	Sub Woofer Level 2
31	FL_DOUT/ EFP_TxD1	O	Serial Data To FL Driver (Output)
32	FL_CS1/ EFP_RxD1	I/O	FL Driver Chip Select (Master)
33	FL_CLK/ EFP_CLK1	I/O	Serial Clock To FL Driver
34	FL_CS2/ EFP_BUSY	I/O	FL Driver Chip Select (Slave)
35	MDATA_OUT	O	CD Command Data Output
36	STATUS	I	CD Servo LSI Status Input
37	MCLK	O	CD Command Clock Output
38	MLD	O	CD Command Load Output
39	/FL_RESET	O	Reset Input (ACTIVE L)
40	MUTE_A	O	Audio Mute
41	EE_CS/ EFP_/EPM	O	EEPROM Chip Select
42	EE_CLK	O	EEPROM CLOCK
43	EE_DAT	I/O	EEPROM DATA
44	RDS_CLK	I	*1 RDS Clock Input
45	RDS_DAT	I	*1 RDS Data Input
46	PCONT/ EFP_/CE	O	Main Transfomer Control Output

Pin No.	Mark	I/O	Function
47	DCDET	I	DC Detect Input
48	SP_A	O	SPEANA CONTROL OUTPUT A
49	SP_B	O	SPEANA CONTROL OUTPUT B
50	SP_C	O	SPEANA CONTROL OUTPUT C
51	NC	O	No Connection
52	HALF_1	I	DECK 1 HALF PLAYBACK INPUT
53	MODE_1	I	DECK 1 MODE PLAYBACK INPUT
54	PHOTO_2	I	Rotation Detection Signal (Deck 2)
55	PHOTO_1	I	Roatation Detection Signal (Deck 1)
56	PLG1	O	DECK1 plunger control
57	PLG2	O	DECK2 plunger control
58	MTR	O	DECK motor control (“H” for Motor ON)
59	REC	O	H when record circuit is operating
60	DECK1_H	O	H when DECK1 P/B head is selected
61	NC	O	No Connection
62	Vcc	-	Power Supply (+5V)
63	NC	O	No Connection
64	Vss	-	Ground (0V)
65	DMT	O	DECK Mute mecha transition (“L” for MUTE ON)
66	BP1	O	AM beatproof 1 output (“H” for BP1 ON)
67	V_JOG_A	I	Volume Jog A
68	V_JOG_B	I	Volume Jog B
69	EX1_CLK	O	I/O Expander Clock output
70	EX1_DAT	O	I/O Expander Data output
71	REG4	I	Sub Woofer Selector
72	REG3	I	WMA Selector
73	NC	I	No Connection
74	NC	O	No Connection

Pin No.	Mark	I/O	Function
75	NC	O	No Connection
76	SSEQ_LED	O	Super Sound EQ LED
77	SW_LED	O	Sub Woofer LED
78	NC	O	No Connection
79	/CD	O	CD POWER CONTROL (Active Low)
80	CD_RST	O	CD Reset Output
81	NC	O	No Connection
82	/RESTSW	I	CD Limit Switch Input for the Most Inner Point (Active Low)
83	CHG_HLF	O	Changer Half Driver Output
84	CHG_CW	O	Changer Motor Clockwise Output
85	CHG_CCW	O	Changer Motor Counterclockwise Output
86	CHG_SW1	I	CD Changer Switch 1 Input
87	CHG_SW2	I	CD Changer Switch 2 Input
88	CHG_PLR	O	Changer Plunger Output
89	CHG_AD2	I	Changer AD Detection Input (Position / Bottom)
90	CHG_AD1	I	Changer AD Detection Input (Open / Clamp)
91	DECK2	I	DECK CONDITION INPUT 2 (R_INHF/MODE2 /R_INHR/HA LF2
92	KEY3	I	KEY3 INPUT
93	KEY2	I	KEY2 INPUT
94	KEY1	I	KEY1 INPUT
95	SPE_IN	I	SPEANA INPUT
96	AVss	-	Analog Power Supply Input (Connect to GND)
97	REG1	I	Region Setting 1
98	VREF	-	Reference for A-D (5V)
99	AVcc	-	Analog Power Supply Input
100	PLLCE	O	Tuner PLL Chip Enable

20. Troubleshooting Guide


No CD playback
Does the test disc rotate?
NO
YES
Remove the test disc
Turn on close detect switch (S781)
Check "TOC" reading is performed
NO
YES
Does optical pickup move?
NO
Optical pickup moves toward inner track once and then toward outer track slightly (2 or 3 mm).
Does lens make vertical movements?
NO
YES
Does laser diode come on?
NO
YES
Load the test disc
Turn on close detect switch (S781)
Does "Cd 1" appear on the display?
No access
Playing time appear on the display
Are there outputs at pins ①, ② and ③ of IC702?
NG
① BCLK
② LRCK
③ SRDATA
OK
Check the unit
Are there outputs at pins 29 and 28 of IC702?
OK
No signal
IC702 failure
Is pin ⑤ of IC702 at "HIGH" or "LOW"?
"L"
IC702 failure
"H"
Check the position of optical pickup
At outer or around middle track
Is pin ⑤ of CN702 at "HIGH" or "LOW"?
"H"
Inner track limit switch is short-circuited
"L"
At inner track
Is pin ① of CN702 at "HIGH" or "LOW"?
"H"
Inner track limit switch is defective or disconnected
"L" (0 V)
Are there outputs at pins ⑤ and ⑥ of IC702?
NG
OK
Traverse deck failure
Is there an output at pin 28 of IC702? (TRV)
NG
OK
IC703 failure
IC702 failure
Check output at pin (FPD) of TJP01
Below 700 mV or no output
At about 1 Vp-p
Is pin ⑤ of IC702 at "HIGH" or "LOW"? (CLVS)
"L"
IC703 failure
"H"
Is there an output at pin ⑭ of IC702? (KICK)
NG
OK
R726 failure
Check pin ⑮ of IC701 (FPDET)
Changes from "H" to "L"
Remains at "H"
Check pin ⑮ of CN702 (FLOCK)
Changes from "H" to "L"
IC703 failure
Remains at "H"
IC702 failure
Check pin ⑰ of IC701 (TE)
Upper and lower amplitudes of waveform are equal
IC701 failure
No waveform or upper and lower amplitudes are not equal
Optical pickup failure
Is there an output at pin ⑭ of IC702? (FOD)
NG
OK
IC703 failure
IC702 failure
Are there outputs at pins ⑭ and ⑮ of IC702?
NG
OK
Optical pickup failure
Measure voltage across R701
Below 0.4 V
Above 0.4 V
Optical pickup is defective
Measure voltage between ⑬ and ⑭ of Q701
Below 0.6 V
Above 0.6 V
IC701 failure
Q701 or optical pickup is defective

21. Parts Location and Replacement Parts List

Notes:

- Important safety notice:
Components identified by ⚠ ; mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to teh cover page for area or colour)
Parts without these indications can be used for all areas.

- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".

- Capacitor values are in microfarads (μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.

- Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM).

- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availabilityisdependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

- [M] Indicates in the Remarks columns indicates parts supplied by MESA.

- The "(SF)" mark denotes the standard part.

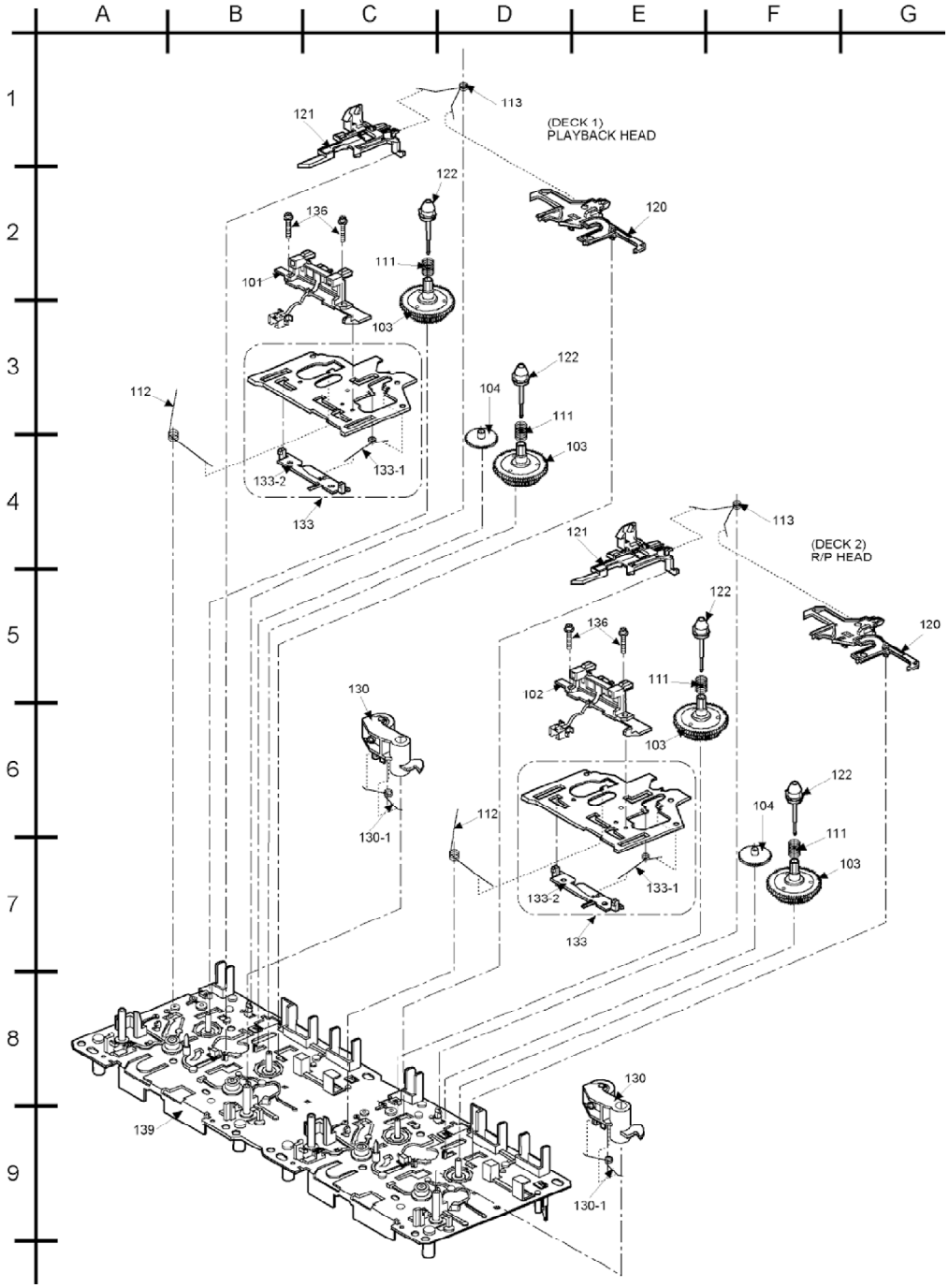
- Remote Control Unit: Supply period for three years from terminal of production.

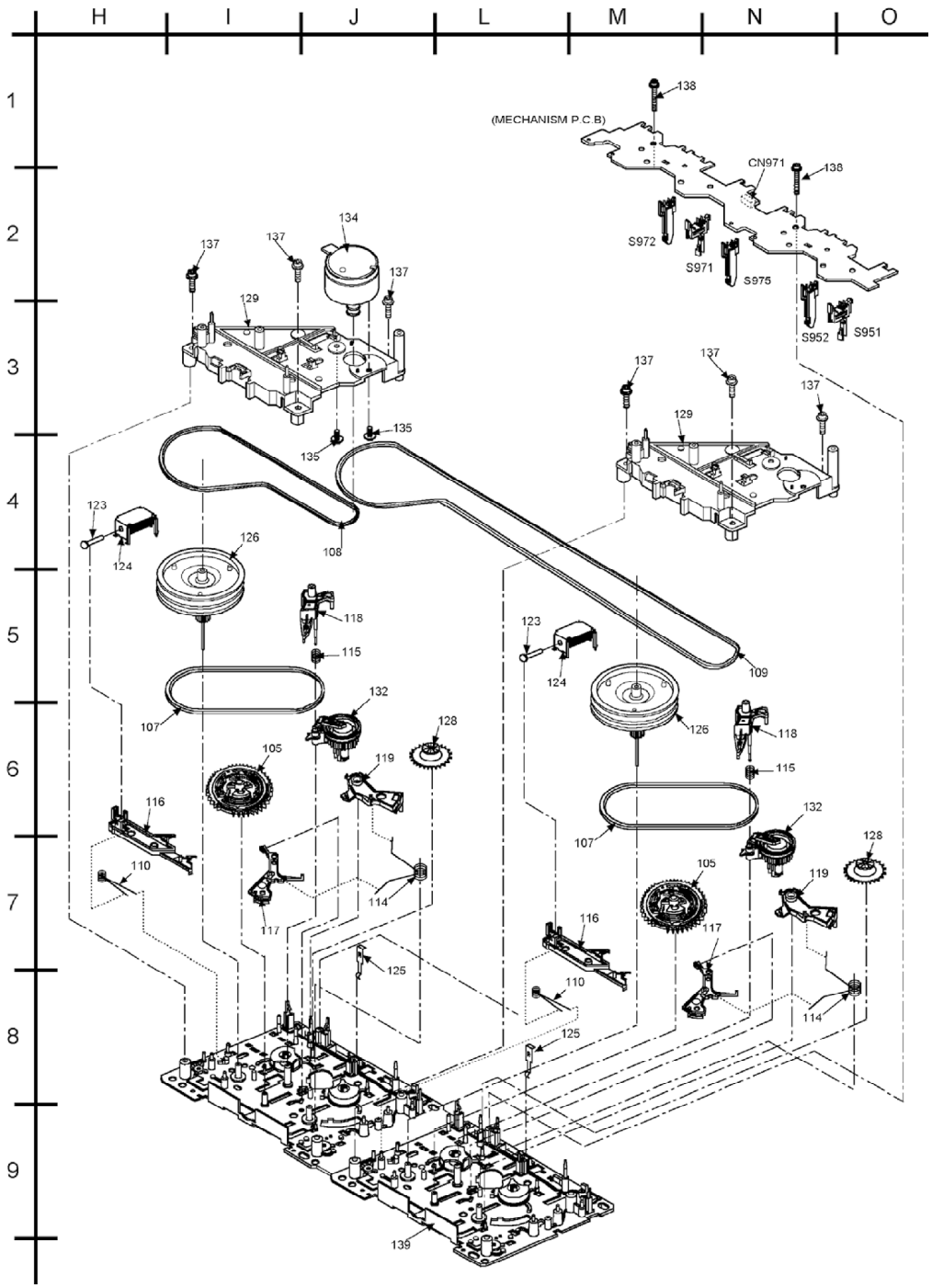
- Reference for O/I book languages are as follows:

Ar:	**Arabic**	**Du:**	**Dutch**	**It:**	**Italian**	**Sp**	**Spanish**
Cf:	**Canadian French**	**En:**	**English**	**Ko:**	**Korean**	**Sw:**	**Swedish**
Cz:	**Czech**	**Fr:**	**French**	**Po:**	**Polish**	**Co:**	**Traditio Chinese**
Da:	**Danish**	**Ge:**	**German**	**Ru:**	**Russian**	**Cn:**	**Simplifie Chinese**

21.1. Deck Mechanism (RAA4502-S)

21.1.1. Deck Mechanism Parts Location



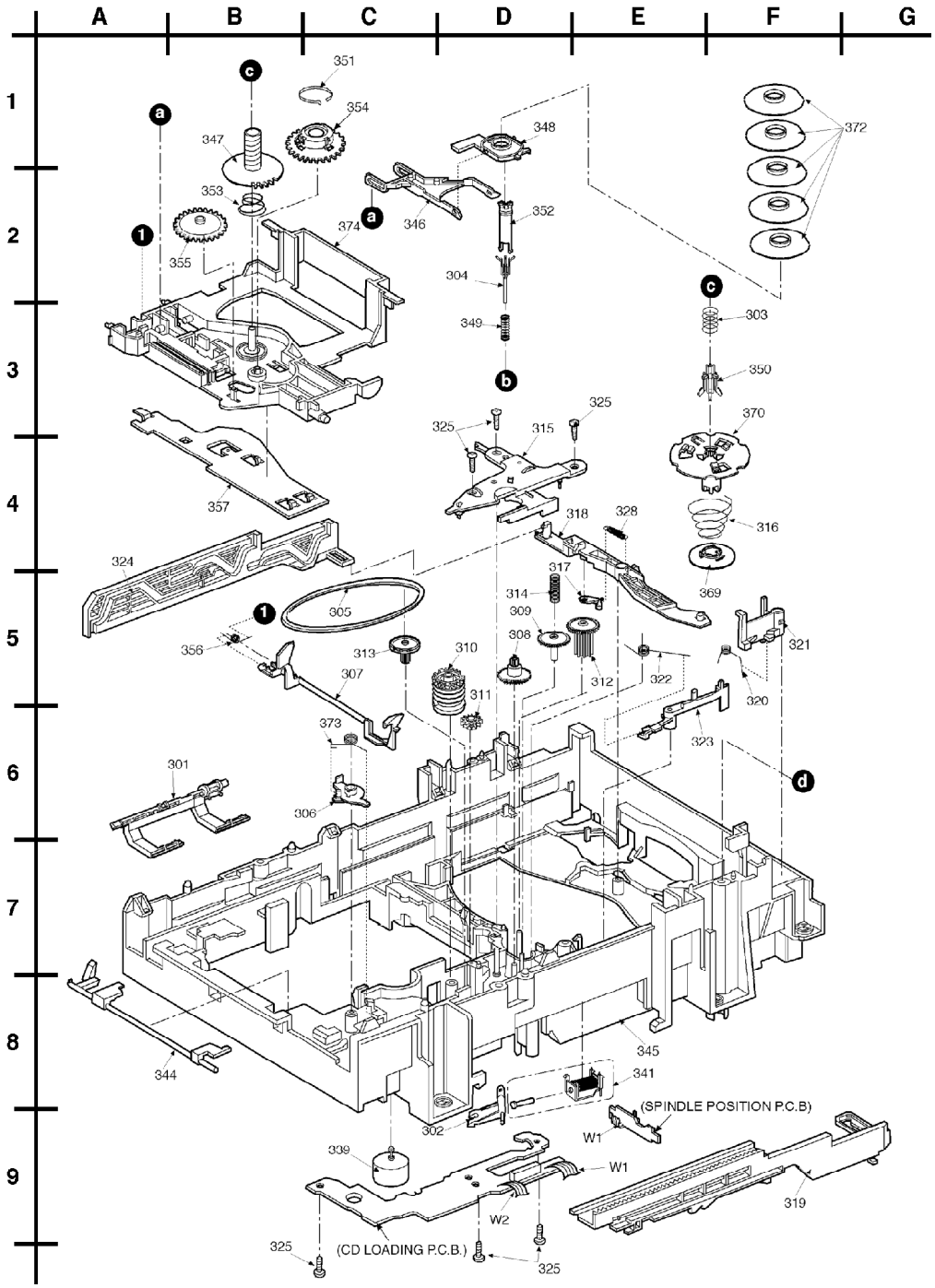


21.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0069	R/P HEAD BLOCK UNIT	[M]
102	RED0070	P/B HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT	[M]
109	RDV0071	CAPSTAN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAB PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS'Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061	FLYWHEEL F ASS'Y	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS'Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS'Y	[M]
133	RXQ0412	HEAD PANEL ASS'Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0088	CAP MOTOR ASS'Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCRE	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASSY	[M]

21.2. CD Loading Mechanism (RD-DAC026-S)

21.2.1. CD Loading Mechanism Parts Location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(SPINDLE POSITION P.C.B)
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W2
(CD LOADING P.C.B.)
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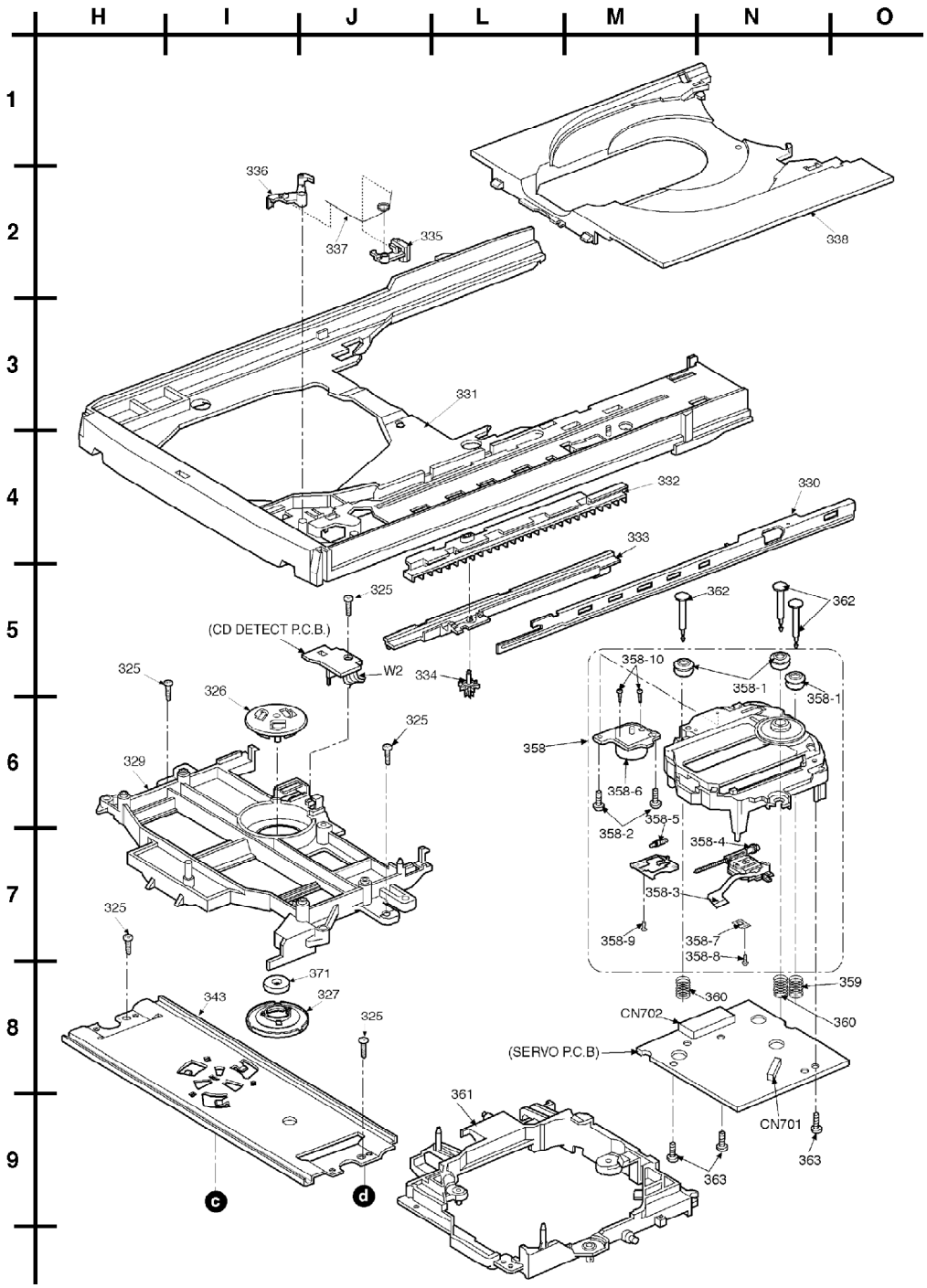


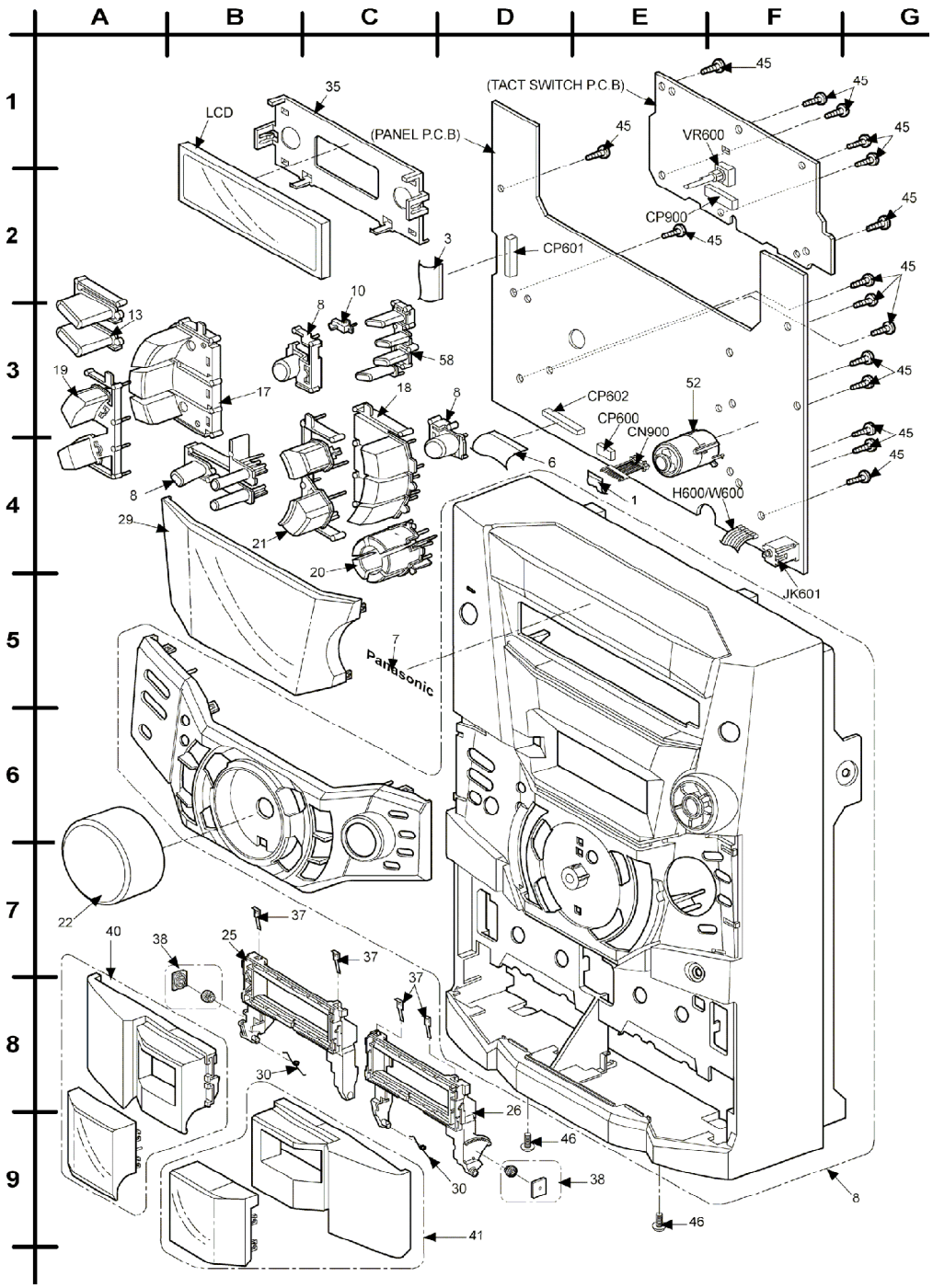
21.2.2. CD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK LEVER	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRAVERSE CAM GEAR	[M]
311	RDG0428	TRAVERSE RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGE GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK	[M]
322	RME0257	TRAY LOCK LEVER SPRI	[M]
323	RML0520	TRAY LOCK	[M]
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR0334	FIXED PLATE	[M]
327	RMR0624-W2	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAY BASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR SUB ASS'Y	[M]
341	RSJ0003	SOLENOLD ASS'Y	[M]
343	RMA1106	UPPER PLATE	[M]
344	RML0519	8CD LEVER	[M]
345	RFKNAAK27GCS	MECHA BASE ASS'Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR 'A'	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
355	RDG0431	RELAY GEAR 'B'	[M]
356	RME0262	DISK LEVER SP.	[M]
357	RMA1105	SUPPORT PLATE	[M]
358	RAE0152Z-3	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-2	SNSD38	TRV MOTOR ASSY SCREW	[M]
358-3	RAF0150A-4S	OPU ASS'Y	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	RELAY GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASS'Y	[M]
358-7	RXQ0304-1	NUT PLATE ASSY	[M]
358-8	XQN17+CG5	NUT PLATE ASSY SCREW	[M]
358-9	XQS2+A3FZ	SPINDLE MOTOR SCREW	[M]
358-10	XQS17+A35FZ	TRAVERSE MOTOR SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR1124A-K	TRAVERSE CHASSIS	[M]
362	RMS0632	TRAVERSE PIN	[M]
363	XTN2+6G	SCREW	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]

21.3. Cabinet

21.3.1. Cabinet Parts Location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LCD
35
(PANEL P.C.B)
(TACT SWITCH P.C.B)
45
VR600
CP900
CP601
3
10
13
19
17
18
58
CP602
CP600
CN900
52
6
1
H600/W600
JK601
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21
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Panasonic
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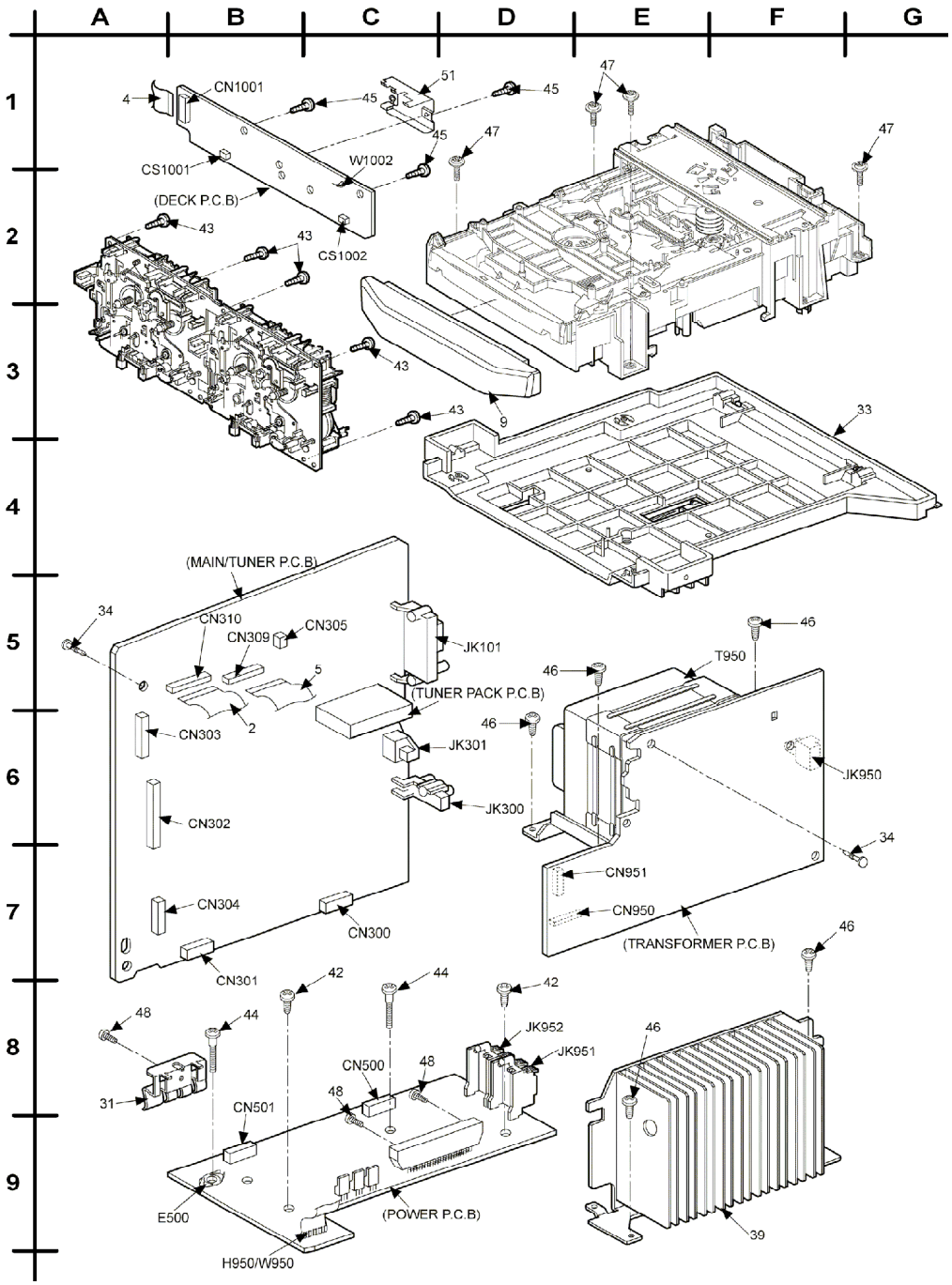
A
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CN1001
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45
47
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CS1001
W1002
(DECK P.C.B)
43
43
CS1002
43
43
9
33
(MAIN/TUNER P.C.B)
34
CN310
CN309
CN305
JK101
5
2
CN303
(TUNER PACK P.C.B)
JK301
JK300
CN302
CN304
CN300
CN301
46
T950
46
46
JK950
34
CN951
CN950
(TRANSFORMER P.C.B)
46
42
44
42
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JK952
JK951
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CN500
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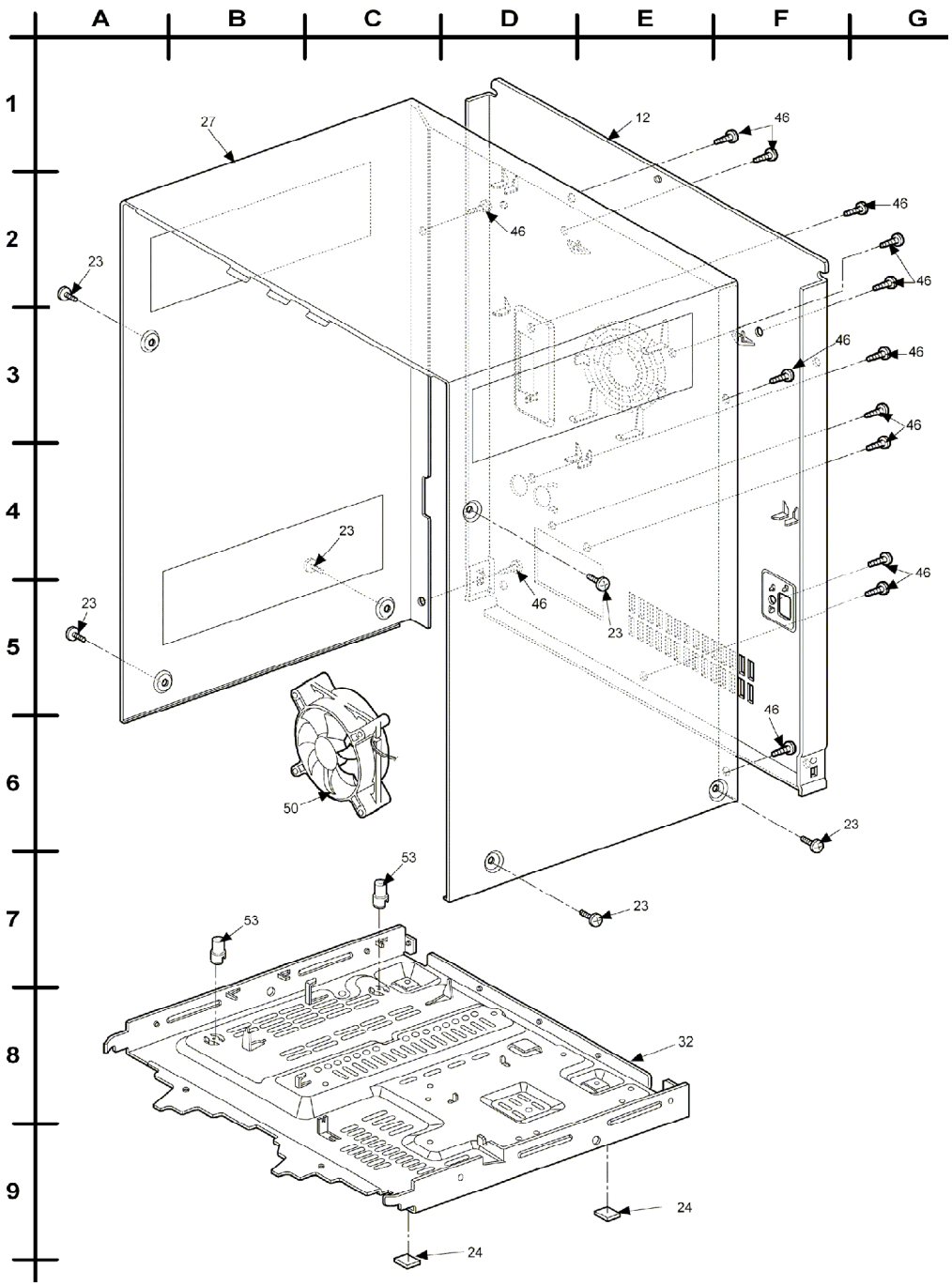
31
CN501
E500
(POWER P.C.B)
H950/W950
39



21.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REEX0202	10P FFC	[M]
2	REEX0203	24P FCC	[M]
3	REEX0210	17P FFC	[M]
4	REEX0211	14P FFC WIRE	[M]
5	REEX0212	14P FFC WIRE	[M]
6	REEX0215	30P FFC	[M]
7	RGBX0011-S	PANA BADGE	[M]
8	RFKGAAK410ES	FRONT PANEL ASS'Y	[MAVD]
9	RGKX0151-SM	CD LID	[MAVD]
10	RGLX0057-Q	POWER LIGHT CHIP	[M]
12	RGRX0023G-A	REAR PANEL	[MAVD]EG E
12	RGRX0023G-C	REAR PANEL	[MAVD]EB
13	RGUX0477A-R	SS EQ BUTTON	[M]
17	RGUX0482-2SM	DECK CONTROL BTN (L)	[MAVD]
18	RGUX0483-2SM	DECK CONTROL BTN (R)	[MAVD]
19	RGUX0484-1SM	FUNCTION BUTTON (L)	[MAVD]
20	RGUX0488-A	CD CONTROL BUTTON	[M]
21	RGUX0487-1SM	FUNCTION BUTTON (R)	[MAVD]
22	RGWX0078-1SM	VOLUME KNOB	[MAVD]
23	RHD30004-1S	SCREW	[M]
24	RKA0059-K	LEG RUBBER	[M]
25	RKFX0093-KL	CASS HOLDER (L)	[MAVD]
26	RKFX0094-KL	CASS HOLDER (R)	[MAVD]
27	RKMX0077-SM	TOP CABINET (BENT)	[MAVD]
29	RKWX0191C-VM	FL WINDOW	[MAVD]
30	RMBX0021-L	CASS OPEN SPRING	[MAVD]
31	RMCX0021	TRANSISTOR CLIP	[M]
32	RMKX0064-M	BOTTOM CHASSIS	[MAVD]
33	RMKX0066-M	CD CHASSIS	[MAVD]
34	RMNX0019	PCB SPACER	[M]
35	RMNX0080	FL HOLDER	[M]
37	RUS757ZAA	CASSETTE HALF SPRING	[M]
38	RXGX0002	DAMPER GEAR	[M]
39	RXXX0039A	HEAT SINK UNIT	[M]
40	RYFX0110-SM	CASS LID UNIT (L)	[MAVD]
41	RYFX0111-SM	CASS LID UNIT (R)	[MAVD]
42	XTB3+10J	SCREW	[M]
43	XTB3+10JFZ	SCREW	[M]
44	XTB3+20J	SCREW	[M]
45	XTBS26+10J	SCREW	[M]
46	XTBS3+8JFZ1	SCREW	[M]
47	XTW3+12T	SCREW	[M]
48	XTW3+15T	SCREW	[M]
50	REM0072-3	FAN	[M]
51	RSCX0085	DECK SHIELD PLATE	[M]
52	RYQX0073-S	NAVIGATION JOY UNIT	[M]
53	SHE187-5J	PCB SUPPORT	[M]
58	RGUX0485-1S1	NAVIGATION BUTTON	[MAVD]

21.4. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REPX0295A	CD SERVO P.C.B.(side:A)	[M](RTL)
	REPX0295A	CD SERVO P.C.B.(side:B)	[M](RTL)
	REPX0355A	MAIN P.C.B.	[M](RTL)
	REPX0356A	PANEL P.C.B.	[MAVD](RTL)
	REPX0356A	TACT SWITCH P.C.B.	[MAVD](RTL)
	REPX0352B	TRANSFORMER P.C.B.	[MAVD](RTL)
	REP2578A-N	CD DETECT P.C.B.	[MAVD](RTL)
	REP2578A-N	SPINDLE POSITION P.C.B.	[M](RTL)
	REP2578A-N	CD LOADING P.C.B.	[M](RTL)
	REPX0368B	POWER P.C.B.	[M](RTL)
	REPX0331A	DECK P.C.B.	[M](RTL)
	REPX0321A	DECK MECHANISM P.C.B.	[M](RTL)
		INTEGRATED CIRCUITS	
IC1	C0GAM0000005	IC DRIVE	[M]
IC101	LA1833NMNTLM	IC IF & MPX	[M]
IC102	LC72131MDTRM	IC PLL	[M]
IC300	C1BB00000747	IC ASP	[M]
IC301	C0AABB000117	IC OP-AMP (HP AMP)	[M]
IC302	C1BB00000086	IC SPE ANA	[M]
IC303	C1BB00000715	IC RDS	[M]
IC304	C3EBCG000008	IC EEPROM	[M]
IC305	C2CBJF000006	IC MICRO-P	[MAVD]
IC501	RSN315H42A-P	IC POWER AMP	[M]
IC701	AN8885SBE1	IC RFAMP	[M]
IC702	MN6627911AC1	IC SUPER 1 CHIP LSI	[M]
IC703	AN8739SBTE2	IC 4CH DRIVER	[M]
IC704	C3ABMB000027	IC	[M]
IC705	C0CBAAC00112	IC	[M]
IC902	C0HBB0000035	IC FL DRIVER	[M]
IC903	C0HBB0000035	IC FL DRIVER	[M]
IC951	CNB13030R2AU	IC PHOTO INTERUPTOR	[M]
IC971	CNB13030R2AU	IC PHOTO INTERUPTOR	[M]
IC1001	AN7348STA-E1	IC TAPE PB	[M]
IC1004	C1AA00000612	IC SW	[M]
		TRANSISTORS	
Q1	B1GACFGG0004	TRANSISTOR	[M]
Q101	2SC2058SPTA	TRANSISTOR	[M]
Q102	2SC2058SPTA	TRANSISTOR	[M]
Q106	KRA102MTA	TRANSISTOR	[M]
Q110	2SC3311ARTA	TRANSISTOR	[M]
Q201	KTC3875GRTA	TRANSISTOR	[M]
Q202	KTD1304TA	TRANSISTOR	[M]
Q203	KTD1304TA	TRANSISTOR	[M]
Q204	KTC3875GRTA	TRANSISTOR	[M]
Q205	KTC3875GRTA	TRANSISTOR	[M]
Q207	KTD1304TA	TRANSISTOR	[M]
Q208	KTD1304TA	TRANSISTOR	[M]
Q301	KRA102STA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q302	KRC101STA	TRANSISTOR	[M]
Q303	KRC101STA	TRANSISTOR	[M]
Q308	KTA12710YTA	TRANSISTOR	[M]
Q309	KTC3199GRTA	TRANSISTOR	[M]
Q310	KRA110MTA	TRANSISTOR	[M]
Q312	KRC102STA	TRANSISTOR	[M]
Q313	KTC3875GRTA	TRANSISTOR	[M]
Q314	KTC3875GRTA	TRANSISTOR	[M]
Q315	KRC103MTA	TRANSISTOR	[M]
Q316	KTA1267GRTA	TRANSISTOR	[M]
Q317	KTA1267GRTA	TRANSISTOR	[M]
Q318	KRC102STA	TRANSISTOR	[M]
Q319	KRC102STA	TRANSISTOR	[M]
Q320	KRC102STA	TRANSISTOR	[M]
Q321	KRA102STA	TRANSISTOR	[M]
Q322	KRC102STA	TRANSISTOR	[M]
Q323	KRC102STA	TRANSISTOR	[M]
Q324	KTA12710YTA	TRANSISTOR	[M]
Q325	KRA102STA	TRANSISTOR	[M]
Q370	B1ADCF000001	TRANSISTOR	[M]
Q371	2SD0592ARA	TRANSISTOR	[M]
Q372	B1ADCF000001	TRANSISTOR	[M]
Q373	2SD0592ARA	TRANSISTOR	[M]
Q374	B1ADCF000001	TRANSISTOR	[M]
Q375	B1ABCF000011	TRANSISTOR	[M]
Q401	KTC3875GRTA	TRANSISTOR	[M]
Q402	KTD1304TA	TRANSISTOR	[M]
Q403	KTD1304TA	TRANSISTOR	[M]
Q404	KTC3875GRTA	TRANSISTOR	[M]
Q405	KTC3875GRTA	TRANSISTOR	[M]
Q406	KTC3875GRTA	TRANSISTOR	[M]
Q407	KTD1304TA	TRANSISTOR	[M]
Q408	KTC3875GRTA	TRANSISTOR	[M]
Q501	KTC2026	TRANSISTOR	[M]
Q502	KTA1046	TRANSISTOR	[M]
Q503	KTC2026	TRANSISTOR	[M]
Q504	KTA1046	TRANSISTOR	[M]
Q505	KTA1267GRTA	TRANSISTOR	[M]
Q506	KRA110MTA	TRANSISTOR	[M]
Q507	KTC3199GRTA	TRANSISTOR	[M]
Q508	B1AAKD000009	TRANSISTOR	[M]
Q512	B1AAGC000007	TRANSISTOR	[M]
Q513	B1AAGC000007	TRANSISTOR	[M]
Q514	B1AAGC000007	TRANSISTOR	[M]
Q610	KTC3199GRTA	TRANSISTOR	[M]
Q611	KTC3199GRTA	TRANSISTOR	[M]
Q612	KTC3199GRTA	TRANSISTOR	[M]
Q614	B1GACFGG0004	TRANSISTOR	[M]
Q615	KTA12710YTA	TRANSISTOR	[M]
Q616	KTC3199GRTA	TRANSISTOR	[M]
Q617	KTA12710YTA	TRANSISTOR	[M]
Q618	KRC103MTA	TRANSISTOR	[M]
Q619	KRC103MTA	TRANSISTOR	[M]
Q701	B1ADCF000001	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q950	KTC3205YTA	TRANSISTOR	[M]
Q951	2SB621ARSTA	TRANSISTOR	[M]
Q952	KRC102MTA	TRANSISTOR	[M]
Q953	B1AAGC000007	TRANSISTOR	[M]
Q1001	KTC3875GRTA	TRANSISTOR	[M]
Q1003	B1AAGC000007	TRANSISTOR	[M]
Q1004	B1AAGC000007	TRANSISTOR	[M]
Q1005	B1AAGC000007	TRANSISTOR	[M]
Q1007	KTC3875GRTA	TRANSISTOR	[M]
Q1012	KTD1304TA	TRANSISTOR	[M]
Q1013	KTD1304TA	TRANSISTOR	[M]
Q1014	B1ABCF000011	TRANSISTOR	[M]
Q1015	B1ABCF000011	TRANSISTOR	[M]
Q1016	KRA102STA	TRANSISTOR	[M]
Q1017	KTD1146YTA	TRANSISTOR	[M]
Q1020	KTD1304TA	TRANSISTOR	[M]
Q1021	KTD1304TA	TRANSISTOR	[M]
		DIODES	
D2	B0BA4R600003	DIODE	[M]
D101	B0BC5R000009	DIODE	[M]
D201	MA2J72800L	DIODE	[M]
D301	B0BC7R500001	DIODE	[M]
D302	B0ACCK000005	DIODE	[M]
D303	B0ADCJ000020	DIODE	[M]
D304	B0ADCJ000020	DIODE	[M]
D305	B0ADCJ000020	DIODE	[M]
D306	RL1N4003S-P	DIODE	[M]
D307	B0ACCK000005	DIODE	[M]
D308	B0ACCK000005	DIODE	[M]
D309	RL1N4003S-P	DIODE	[M]
D310	B0ACCK000005	DIODE	[M]
D312	1SS380TE-17	DIODE	[M]
D313	1SS380TE-17	DIODE	[M]
D314	MA2J72900L	DIODE	[M]
D324	B0ACCK000005	DIODE	[M]
D370	B0ACCK000005	DIODE	[M]
D371	UDZSTE1710B	DIODE	[M]
D374	RL1N4003N02	DIODE	[M]
D375	B0ACCK000005	DIODE	[M]
D376	B0ACCK000005	DIODE	[M]
D377	B0ACCK000005	DIODE	[M]
D401	MA2J72800L	DIODE	[M]
D501	B0BA9R600002	DIODE	[M]
D502	B0BA01500003	DIODE	[M]
D503	B0BA01400041	DIODE	[M]
D504	B0AACK000004	DIODE	[M]
D505	1T3T	DIODE	[M]
D506	1T3T	DIODE	[M]
D507	1T3T	DIODE	[M]
D508	B0BA5R600016	DIODE	[M]
D509	B0BA9R600002	DIODE	[M]
D513	B0AACK000004	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D514	B0AACK000004	DIODE	[M]
D600	B3AAA0000583	DIODE	[M]
D613	B0BA5R600016	DIODE	[M]
D929	B3AAA0000583	DIODE	[M]
D950	1N5402BM21	DIODE	[M]
D951	1N5402BM21	DIODE	[M]
D951	MA2C16500E	DIODE	[M]
D952	1N5402BM21	DIODE	[M]
D953	1N5402BM21	DIODE	[M]
D954	1T3T	DIODE	[M]
D955	1T3T	DIODE	[M]
D956	1T3T	DIODE	[M]
D957	1T3T	DIODE	[M]
D958	1T3T	DIODE	[M]
D959	1T3T	DIODE	[M]
D960	MTZJ27ATA	DIODE	[M]
D961	B0EAKM000085	DIODE	[M]
D962	B0EAKM000085	DIODE	[M]
D963	B0EAKM000085	DIODE	[M]
D964	B0BA6R600008	DIODE	[M]
D965	1T3T	DIODE	[M]
D966	B0EAKM000085	DIODE	[M]
D967	B0EAKM000085	DIODE	[M]
D968	B0EAKM000085	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1003	B0ACCK000005	DIODE	[M]
D1004	B0BC3R700004	DIODE	[M]
		VARIABLE RESISTORS	
VR600	EVEKE2F3524B	VR VOLUME JOG	[M]
		SWITCHES	
S601	EVQ21405RJ	SW POWER	[M]
S602	EVQ21405RJ	SW PRESET EQ	[M]
S603	EVQ21405RJ	SW DECK 1/2	[M]
S604	EVQ21405RJ	SW REC	[M]
S605	EVQ21405RJ	SW CD OPEN/CLOSE	[M]
S606	EVQ21405RJ	SW CD 1	[M]
S607	EVQ21405RJ	SW CD 2	[M]
S608	EVQ21405RJ	SW CD 3	[M]
S609	EVQ21405RJ	SW CD 4	[M]
S610	EVQ21405RJ	SW CD 5	[M]
S612	EVQ21405RJ	SW SSEQ	[M]
S613	EVQ21405RJ	SW S. WOOFER	[M]
S614	EVQ11V07B	SW UP	[M]
S615	EVQ11V07B	SW RIGHT	[M]
S616	EVQ11V07B	SW DOWN	[M]
S617	EVQ11V07B	SW LEFT	[M]
S618	EVQ21405RJ	SW TITLE SEARCH	[M]
S619	EVQ21405RJ	SW ENTER	[M]
S620	EVQ21405RJ	SW MARKER	[M]
S621	EVQ21405RJ	SW DELETE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S701	RSH1A053-U	SW RESET	[M]
S901	EVQ21405RJ	SW REW	[M]
S902	EVQ21405RJ	SW TUNER	[M]
S903	EVQ21405RJ	SW CD PLAY	[M]
S904	EVQ21405RJ	SW FF	[M]
S905	EVQ21405RJ	SW STOP	[M]
S906	EVQ21405RJ	SW DECK 2 OPEN	[M]
S907	EVQ21405RJ	SW TAPE	[M]
S908	EVQ21405RJ	SW AUX	[M]
S909	EVQ21405RJ	SW DEKC 1 OPEN	[M]
S910	EVQ21405RJ	SW DISPLAY	[M]
S951	RSH1A018-3U	SW MODE	[M]
S952	RSH1A019-2U	SW HALF	[M]
S971	RSH1A018-3U	SW MODE	[M]
S972	RSH1A019-2U	SW HALF	[M]
S975	RSH1A019-2U	SW HALF	[M]
		SWITCHES	
SW1	RSH1A032-U	SW PUSH	[M]
SW2	RSH1A032-U	SW PUSH	[M]
SW3	RSH1A005-1U	SW OPEN	[M]
SW4	RSH1A91ZA-A	SW CD	[M]
SW5	K0L1BB000005	SW LOCK	[M]
		CONNECTORS	
CN1	K1MN14A00049	14P FFC CONNECTOR	[M]
CN300	K1KB12B00036	12P P2 MQ CONNECTOR	[M]
CN301	K1KB12B00036	12P P2 MQ CONNECTOR	[M]
CN302	K1MN30A00046	30P FFC CONNECTOR	[M]
CN303	RJS1A9417	P1.25 FFC CONNECTOR	[M]
CN304	RJS1A9414-1	14P CONNECTOR	[M]
CN305	K1KA02A00008	CONNECTOR	[M]
CN309	RJS1A9414-1	14P CONNECTOR	[M]
CN310	RJS2A8024-1	24P FFC CONNECTOR	[M]
CN500	K1KA12A00184	12P P2 MQ CONNECTOR	[M]
CN501	K1KA12A00184	12P P2 MQ CONNECTOR	[M]
CN701	RJS2A8616	16P FPC CONNECTOR	[M]
CN702	K1MN24B00090	24P FFC CONNECTOR	[M]
CN900	RJT066H08B	8P BTB CONNECTOR	[M]
CN950	RJT119W09V	9P CONNECTOR	[M]
CN951	K1KA09A00047	9P PLUG IN CONNECTOR	[M]
CN971	K1MN10B00104	10P FFC CONNECTOR	[M]
CN1001	K1MN14B00058	14P CONNECTOR	[M]
CP600	K1MN10B00104	10P FFC CONNECTOR	[M]
CP601	RJS1A9417	P1.25 FFC CONNECTOR	[M]
CP602	K1MN30A00046	30P FFC CONNECTOR	[M]
CP900	RJU066H08	8P B-B SOCKET	[M]
CS1001	RJS1A6805-J	5P CONNECTOR SOCKET	[M]
CS1002	RJS1A6805-J	5P CONNECTOR SOCKET	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		COILS & TRANSFORMERS	
L201	G0AR76Y00001	CHOKE COIL	[M]
L202	G0AR76Y00001	CHOKE COIL	[M]
L301	G0C101JA0030	INDUCTOR	[M]
L302	G0C101JA0030	INDUCTOR	[M]
L303	G0C101JA0030	INDUCTOR	[M]
L304	RLQB3R3KT-1Y	COIL	[M]
L305	J0JBC0000019	CHIP INDUCTOR	[M]
L401	G0AR76Y00001	CHOKE COIL	[M]
L402	G0AR76Y00001	CHOKE COIL	[M]
L600	RLQB3R3KT-1Y	COIL	[M]
L601	RLQB101KT-1Y	COIL	[M]
L602	ELEXT101KA04	AXIAL COIL	[MAVD]
L603	ELEXT101KA04	AXIAL COIL	[MAVD]
L604	ELEXT100KA04	AXIAL COIL	[MAVD]
L608	RLQB100KT-1Y	COIL	[M]
L609	ELEXT100KA04	AXIAL COIL	[MAVD]
L610	RLQB100KT-1Y	COIL	[M]
L701	RLBV102V-Y	INDUCTOR	[M]
L702	RLBV102V-Y	INDUCTOR	[M]
L703	RLBV102V-Y	INDUCTOR	[M]
L704	RLBV102V-Y	INDUCTOR	[M]
L950	ELF15N035AN	LINE FILTER	[M] ⚠
L1001	G0C470JA0030	RF CHOKE COIL	[M]
L1002	7L1A62N	BIAS OSC COIL	[M]
T950	ETP76VST62AA	MAIN TRANSFORMER	[M] ⚠
T951	G4C2AAJ00005	BACK-UP TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z101	RLA2Z007-T	COIL	[M]
Z102	G2BAE0000003	AM IF BLOCK	[M]
Z120	ENV17290G1Y	FM TUNER PACK	[M]
Z600	B3RAB0000025	REMOTE SENSOR	[M]
Z950	ERZV10V511CS	ZENER	[M] ⚠
Z971	RGSD12A1445T	RADA RESISTOR	[M]
		CERAMIC FILTERS	
CF201	J0B1075A0086	CERAMIC FILTER	[M]
CF202	J0B1075A0077	CERAMIC FILTER	[M]
		RELAY	
RL950	RSY0040M-0	PRIMARY RELAY	[M] ⚠
		OSCILLATORS	
X102	RLFDFT22DD	DISCRIMINATOR	[M]
X103	RSXC7M20S05T	CRYSTAL OSCILLATOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
X301	H0A327200073	CRYSTAL OSCILLATOR	[M]
X302	H0H433400001	CRYSTAL OSCILLATOR	[M]
X303	H2A100500006	10 MHZ RESONATOR	[M]
X701	RSXB16M9J02T	CRYSTAL OSCILLATOR	[M]
		DISPLAY TUBE	
FL601	A2BD00000062	FL	[M]
		FUSES	
F1	218016MA000	1.6A FUSE	[M] ⚠
		FUSE HOLDERS	
FC1	EYF52BC	FUSE HOLDER	[M]
FC2	EYF52BC	FUSE HOLDER	[M]
		FUSE PROTECTOR	
FP533	K5G400A00001	FUSABLE RESISTOR	[M] ⚠
FP950	K5G402AA0002	FUSE PROTECTOR	[M] ⚠
FP951	K5G102AA0002	FUSE PROTECTOR	[M] ⚠
		HOLDERS	
H600	RMR0318	9P CABLE HOLDER	[M]
H950	RJS1A5509	9P CABLE HOLDER	[M]
		JACKS	
JK101	RJH8304N	JK ANTENNA	[M]
JK300	RJH2213N-2	JK 2P RCA	[M]
JK301	B3ZAZ0000011	JK OPT TERMINAL	[MAVD]
JK601	RJJ37TK07	JK HP/MIC	[M]
JK950	K2AA2B000004	JK AC INLET	[M] ⚠
JK951	K4BC04B00050	JK TERMINAL SPEAKER	[M]
JK952	K4BC04B00046	JK SPEAKER	[M]
		EARTH TERMINAL	
E500	SNE1004-2	EARTH TERMINAL	[M]
E501	RSQX0001-1	EARTH PLATE	[M]
		WIRES	
W1	REZ1023-1	4P WIRE	[M]
W2	REZ1024	3P WIRE	[M]
W600	REXX0324	9P (2MM) FLAT WIRE	[M]
W950	REXX0325	9P (2.5MM) FLAT WIRE	[M]
W1002	RWJ0102050CK	MAIN-MECHA MOTOR WIR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		RESISTORS	
R1	ERDS2TJ102T	1K 1/4W	[M]
R102	ERJ3GEYJ472V	4.7K 1/16W	[M]
R103	ERJ3GEYJ101V	100 1/16W	[M]
R104	ERJ3GEYJ103V	10K 1/16W	[M]
R105	ERJ3GEYJ471V	470 1/16W	[M]
R106	ERJ3GEYJ474V	470K 1/16W	[M]
R107	ERJ3GEYJ331V	330 1/16W	[M]
R108	ERJ3GEYJ474V	470K 1/16W	[M]
R109	ERJ3GEYJ331V	330 1/16W	[M]
R110	ERJ3GEYJ102V	1K 1/16W	[M]
R111	ERJ3GEYJ391V	390 1/16W	[M]
R112	ERJ3GEYJ104V	100K 1/16W	[M]
R113	ERJ3GEYJ103V	10K 1/16W	[M]
R114	ERJ3GEYJ562V	5.6K 1/16W	[M]
R115	ERJ3GEYJ561V	560 1/16W	[M]
R116	ERJ3GEYJ102V	1K 1/16W	[M]
R117	ERJ3GEYJ683V	68K 1/16W	[M]
R118	ERJ3GEYJ332V	3.3K 1/16W	[M]
R119	ERJ3GEYJ123V	12K 1/16W	[M]
R120	ERJ3GEYJ473V	47K 1/16W	[M]
R121	ERJ3GEYJ223V	22K 1/16W	[M]
R122	ERJ3GEYJ272V	2.7K 1/16W	[M]
R123	ERJ3GEYJ683V	68K 1/16W	[M]
R124	ERJ3GEYJ330V	33 1/16W	[M]
R125	ERJ3GEYJ471V	470 1/16W	[M]
R126	ERJ3GEYJ102V	1K 1/16W	[M]
R127	ERJ3GEYJ471V	470 1/16W	[M]
R128	ERJ3GEYJ820V	82 1/16W	[M]
R129	ERJ3GEYJ273V	27K 1/16W	[M]
R130	ERJ3GEYJ103V	10K 1/16W	[M]
R131	ERJ3GEYJ121V	120 1/16W	[M]
R132	ERJ3GEYJ103V	10K 1/16W	[M]
R133	ERJ3GEYJ102V	1K 1/16W	[M]
R134	ERJ3GEYJ471V	470 1/16W	[M]
R135	ERJ3GEYJ102V	1K 1/16W	[M]
R136	ERJ3GEYJ102V	1K 1/16W	[M]
R137	ERJ3GEYJ102V	1K 1/16W	[M]
R138	ERJ3GEYJ332V	3.3K 1/16W	[M]
R139	ERJ3GEYJ223V	22K 1/16W	[M]
R140	ERJ3GEYJ223V	22K 1/16W	[M]
R141	ERJ3GEYJ682V	6.8K 1/16W	[M]
R142	ERJ3GEYJ682V	6.8K 1/16W	[M]
R143	ERJ3GEYJ223V	22K 1/16W	[M]
R144	ERJ3GEYJ121V	120 1/16W	[M]
R145	ERJ3GEYJ104V	100K 1/16W	[M]
R146	ERJ3GEYJ104V	100K 1/16W	[M]
R151	ERJ3GEYJ820V	82 1/16W	[M]
R152	ERJ3GEY0R00V	0 1/16W	[M]
R201	ERJ3GEYJ103V	10K 1/16W	[M]
R202	ERJ3GEYJ332V	3.3K 1/16W	[M]
R203	ERJ3GEYJ1R0V	1 1/16W	[M]
R204	ERJ3GEYJ330V	33 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R205	ERJ3GEYJ330V	33 1/16W	[M]
R206	ERJ3GEYJ330V	33 1/16W	[M]
R207	ERJ3GEYJ330V	33 1/16W	[M]
R208	ERJ3GEYJ332V	3.3K 1/16W	[M]
R209	ERJ3GEYJ561V	560 1/16W	[M]
R210	ERJ3GEYJ820V	82 1/16W	[M]
R211	ERJ3GEYJ562V	5.6K 1/16W	[M]
R212	ERJ3GEYJ102V	1K 1/16W	[M]
R213	ERJ3GEYJ473V	47K 1/16W	[M]
R214	ERJ3GEYJ102V	1K 1/16W	[M]
R215	ERJ3GEYJ473V	47K 1/16W	[M]
R216	ERJ3GEYJ104V	100K 1/16W	[M]
R217	ERJ3GEYJ822V	8.2K 1/16W	[M]
R218	ERJ3GEYJ563V	56K 1/16W	[M]
R219	ERJ3GEYJ152V	1.5K 1/16W	[M]
R220	ERJ3GEYJ392V	3.9K 1/16W	[M]
R221	ERJ3GEYJ473V	47K 1/16W	[M]
R222	ERJ3GEYJ821V	820 1/16W	[M]
R223	ERJ3GEYJ272V	2.7K 1/16W	[M]
R224	ERJ3GEYJ472V	4.7K 1/16W	[M]
R225	ERJ3GEYJ473V	47K 1/16W	[M]
R226	ERJ3GEYJ332V	3.3K 1/16W	[M]
R227	ERJ3GEYJ683V	68K 1/16W	[M]
R228	ERJ3GEYJ222V	2.2K 1/16W	[M]
R229	ERJ3GEYJ123V	12K 1/16W	[M]
R230	ERJ3GEYJ102V	1K 1/16W	[M]
R231	ERJ3GEYJ104V	100K 1/16W	[M]
R232	ERJ3GEYJ222V	2.2K 1/16W	[M]
R233	ERJ3GEYJ472V	4.7K 1/16W	[M]
R234	ERJ3GEYJ104V	100K 1/16W	[M]
R235	ERJ3GEYJ152V	1.5K 1/16W	[M]
R236	ERJ3GEYJ183V	18K 1/16W	[M]
R237	ERJ3GEYJ183V	18K 1/16W	[M]
R238	ERJ3GEYJ224V	220K 1/16W	[M]
R239	ERJ3GEYJ472V	4.7K 1/16W	[M]
R240	ERJ3GEYJ472V	4.7K 1/16W	[M]
R241	ERJ3GEYJ123V	12K 1/16W	[M]
R242	ERJ3GEYJ562V	5.6K 1/16W	[M]
R243	ERJ3GEYJ272V	2.7K 1/16W	[M]
R244	ERJ3GEYJ182V	1.8K 1/16W	[M]
R245	ERDS2TJ332T	3.3K 1/4W	[M]
R245	ERJ3GEYJ221V	220 1/16W	[M]
R246	ERDS2TJ153T	15K 1/4W	[M]
R247	ERDS2TJ332T	3.3K 1/4W	[M]
R247	ERJ3GEYJ221V	220 1/16W	[M]
R248	ERDS2TJ153T	15K 1/4W	[M]
R248	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R249	ERDS2TJ683T	68K 1/4W	[M]
R249	ERJ3GEYJ221V	220 1/16W	[M]
R250	ERDS2TJ683T	68K 1/4W	[M]
R251	ERDS2TJ154T	150K 1/4W	[M]
R252	ERDS2TJ104T	100K 1/4W	[M]
R253	ERDS2TJ100T	10 1/4W	[M]
R254	ERDS2TJ100T	10 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R255	ERDS1FVJ100T	10 1/2W	[M]
R255	ERJ3GEYJ104V	100K 1/16W	[M]
R256	ERDS1FVJ100T	10 1/2W	[M]
R256	ERJ3GEYJ152V	1.5K 1/16W	[M]
R257	ERJ3GEYJ123V	12K 1/16W	[M]
R258	ERJ3GEYJ224V	220K 1/16W	[M]
R259	ERJ3GEYJ152V	1.5K 1/16W	[M]
R301	ERJ3GEYJ472V	4.7K 1/16W	[M]
R302	ERJ3GEYJ103V	10K 1/16W	[M]
R303	ERDS1FVJ270T	27 1/2W	[M]
R304	ERJ3GEYJ103V	10K 1/16W	[M]
R305	ERJ3GEYJ682V	6.8K 1/16W	[M]
R307	ERJ3GEYJ222V	2.2K 1/16W	[M]
R308	ERJ3GEYJ222V	2.2K 1/16W	[M]
R309	ERJ3GEYJ273V	27K 1/16W	[M]
R310	ERJ3GEYJ562V	56K 1/16W	[M]
R313	ERJ3GEYJ104V	100K 1/16W	[M]
R315	ERJ3GEYJ822V	8.2K 1/16W	[M]
R318	ERJ3GEYJ332V	3.3K 1/16W	[M]
R320	ERJ3GEYJ101V	100 1/16W	[M]
R321	ERJ3GEYJ101V	100 1/16W	[M]
R322	ERJ3GEYJ101V	100 1/16W	[M]
R323	ERDS1FVJ150T	15 1/2W	[M]
R324	ERD2FCVG120T	12 1/4W	[M]
R325	ERJ3GEYJ103V	10K 1/16W	[M]
R326	ERJ3GEYJ101V	100 1/16W	[M]
R327	ERJ3GEYJ222V	2.2K 1/16W	[M]
R328	ERJ3GEYJ392V	3.9K 1/16W	[M]
R329	ERJ3GEYJ331V	330 1/16W	[M]
R330	ERJ3GEY0R00V	0 1/16W	[M]
R331	ERJ3GEY0R00V	0 1/16W	[M]
R332	ERJ3GEYJ101V	100 1/16W	[M]
R333	ERJ3GEYJ101V	100 1/16W	[M]
R334	ERJ3GEYJ101V	100 1/16W	[M]
R335	ERJ3GEYJ101V	100 1/16W	[M]
R336	ERJ3GEYJ101V	100 1/16W	[M]
R337	ERJ3GEYJ102V	1K 1/16W	[M]
R338	ERJ3GEYJ102V	1K 1/16W	[M]
R339	ERJ3GEYJ102V	1K 1/16W	[M]
R340	ERJ3GEYJ103V	10K 1/16W	[M]
R341	ERJ3GEYJ102V	1K 1/16W	[M]
R342	ERJ3GEYJ102V	1K 1/16W	[M]
R343	ERJ3GEYJ103V	10K 1/16W	[M]
R344	ERJ3GEYJ223V	22K 1/16W	[M]
R345	ERJ3GEYJ123V	12K 1/16W	[M]
R346	ERJ3GEYJ223V	22K 1/16W	[M]
R347	ERJ3GEYJ123V	12K 1/16W	[M]
R348	ERJ3GEYJ221V	220 1/16W	[M]
R349	ERJ3GEYJ102V	1K 1/16W	[M]
R350	ERJ3GEYJ103V	10K 1/16W	[M]
R352	ERJ3GEYJ332V	3.3K 1/16W	[M]
R353	ERJ3GEYJ822V	8.2K 1/16W	[M]
R354	ERJ3GEYJ101V	100 1/16W	[M]
R355	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R356	ERJ3GEYJ103V	10K 1/16W	[M]
R357	ERJ3GEYJ102V	1K 1/16W	[M]
R358	ERJ3GEYJ103V	10K 1/16W	[M]
R359	ERJ3GEYJ103V	10K 1/16W	[M]
R360	ERJ3GEYJ103V	10K 1/16W	[M]
R361	ERJ3GEYJ102V	1K 1/16W	[M]
R362	ERJ3GEYJ102V	1K 1/16W	[M]
R363	ERJ3GEYJ102V	1K 1/16W	[M]
R364	ERJ3GEYJ102V	1K 1/16W	[M]
R365	ERJ3GEYJ102V	1K 1/16W	[M]
R366	ERJ3GEYJ102V	1K 1/16W	[M]
R367	ERJ3GEYJ103V	10K 1/16W	[M]
R368	ERJ3GEYJ103V	10K 1/16W	[M]
R369	ERJ3GEYJ103V	10K 1/16W	[M]
R370	ERJ3GEYJ104V	100K 1/16W	[M]
R371	ERJ3GEYJ472V	4.7K 1/16W	[M]
R372	ERJ3GEYJ472V	4.7K 1/16W	[M]
R373	ERJ3GEYJ332V	3.3K 1/16W	[M]
R374	ERJ3GEYJ104V	100K 1/16W	[M]
R375	ERJ3GEYJ103V	10K 1/16W	[M]
R376	ERDS1FVJ220T	22 1/2W	[M]
R377	ERJ3GEYJ224V	220K 1/16W	[M]
R378	ERJ3GEYJ101V	100 1/16W	[M]
R379	ERJ3GEYJ104V	100K 1/16W	[M]
R380	ERJ3GEYJ103V	10K 1/16W	[M]
R381	ERJ3GEYJ225V	2.2M 1/16W	[M]
R382	ERJ3GEYJ103V	10K 1/16W	[M]
R383	ERJ3GEYJ103V	10K 1/16W	[M]
R384	ERJ3GEYJ103V	10K 1/16W	[M]
R385	ERJ3GEYJ103V	10K 1/16W	[M]
R386	ERJ3GEYJ103V	10K 1/16W	[M]
R387	ERJ3GEYJ103V	10K 1/16W	[M]
R388	ERJ3GEYJ103V	10K 1/16W	[M]
R389	ERJ3GEYJ103V	10K 1/16W	[M]
R390	ERJ3GEYJ103V	10K 1/16W	[M]
R391	ERJ3GEYJ472V	4.7K 1/16W	[M]
R392	ERJ3GEYJ103V	10K 1/16W	[M]
R393	ERJ3GEYJ103V	10K 1/16W	[M]
R394	ERJ3GEYJ103V	10K 1/16W	[M]
R395	ERJ3GEYJ473V	47K 1/16W	[M]
R396	ERJ3GEYJ473V	47K 1/16W	[M]
R397	ERJ3GEYJ104V	100K 1/16W	[M]
R398	ERJ3GEYJ103V	10K 1/16W	[M]
R399	ERJ3GEYJ103V	10K 1/16W	[M]
R400	ERJ3GEYJ103V	10K 1/16W	[M]
R401	ERJ3GEYJ103V	10K 1/16W	[M]
R402	ERJ3GEYJ332V	3.3K 1/16W	[M]
R403	ERJ3GEYJ1R0V	1 1/16W	[M]
R404	ERJ3GEYJ330V	33 1/16W	[M]
R405	ERJ3GEYJ330V	33 1/16W	[M]
R406	ERJ3GEYJ330V	33 1/16W	[M]
R407	ERJ3GEYJ330V	33 1/16W	[M]
R408	ERJ3GEYJ332V	3.3K 1/16W	[M]
R409	ERJ3GEYJ561V	560 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R410	ERJ3GEYJ820V	82 1/16W	[M]
R411	ERJ3GEYJ562V	5.6K 1/16W	[M]
R412	ERJ3GEYJ102V	1K 1/16W	[M]
R413	ERJ3GEYJ473V	47K 1/16W	[M]
R414	ERJ3GEYJ102V	1K 1/16W	[M]
R415	ERJ3GEYJ473V	47K 1/16W	[M]
R416	ERJ3GEYJ104V	100K 1/16W	[M]
R417	ERJ3GEYJ822V	8.2K 1/16W	[M]
R418	ERJ3GEYJ563V	56K 1/16W	[M]
R419	ERJ3GEYJ152V	1.5K 1/16W	[M]
R420	ERJ3GEYJ392V	3.9K 1/16W	[M]
R421	ERJ3GEYJ473V	47K 1/16W	[M]
R422	ERJ3GEYJ821V	820 1/16W	[M]
R423	ERJ3GEYJ272V	2.7K 1/16W	[M]
R424	ERJ3GEYJ472V	4.7K 1/16W	[M]
R425	ERJ3GEYJ473V	47K 1/16W	[M]
R426	ERJ3GEYJ332V	3.3K 1/16W	[M]
R427	ERJ3GEYJ683V	68K 1/16W	[M]
R428	ERJ3GEYJ222V	2.2K 1/16W	[M]
R429	ERJ3GEYJ123V	12K 1/16W	[M]
R430	ERJ3GEYJ102V	1K 1/16W	[M]
R431	ERJ3GEYJ104V	100K 1/16W	[M]
R432	ERJ3GEYJ222V	2.2K 1/16W	[M]
R433	ERJ3GEYJ472V	4.7K 1/16W	[M]
R434	ERJ3GEYJ104V	100K 1/16W	[M]
R435	ERJ3GEYJ152V	1.5K 1/16W	[M]
R436	ERJ3GEYJ183V	18K 1/16W	[M]
R437	ERJ3GEYJ183V	18K 1/16W	[M]
R438	ERJ3GEYJ224V	220K 1/16W	[M]
R439	ERJ3GEYJ472V	4.7K 1/16W	[M]
R440	ERJ3GEYJ472V	4.7K 1/16W	[M]
R441	ERJ3GEYJ123V	12K 1/16W	[M]
R442	ERJ3GEYJ562V	5.6K 1/16W	[M]
R443	ERJ3GEYJ272V	2.7K 1/16W	[M]
R444	ERJ3GEYJ182V	1.8K 1/16W	[M]
R445	ERDS2TJ332T	3.3K 1/4W	[M]
R445	ERJ3GEYJ221V	220 1/16W	[M]
R446	ERDS2TJ153T	15K 1/4W	[M]
R446	ERJ3GEYJ223V	22K 1/16W	[M]
R447	ERDS2TJ332T	3.3K 1/4W	[M]
R447	ERJ3GEYJ221V	220 1/16W	[M]
R448	ERDS2TJ153T	15K 1/4W	[M]
R448	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R449	ERDS2TJ683T	68K 1/4W	[M]
R449	ERJ3GEYJ221V	220 1/16W	[M]
R450	ERDS2TJ683T	68K 1/4W	[M]
R450	ERJ3GEYJ472V	4.7K 1/16W	[M]
R451	ERDS2TJ563T	56K 1/4W	[M]
R451	ERJ3GEYJ223V	22K 1/16W	[M]
R452	ERDS2TJ224T	220K 1/4W	[M]
R452	ERJ3GEYJ472V	4.7K 1/16W	[M]
R453	ERDS2TJ100T	10 1/4W	[M]
R454	ERDS2TJ100T	10 1/4W	[M]
R454	ERJ3GEYJ472V	4.7K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R455	ERDS1FVJ100T	10 1/2W	[M]
R455	ERJ3GEYJ104V	100K 1/16W	[M]
R456	ERDS1FVJ100T	10 1/2W	[M]
R456	ERJ3GEYJ152V	1.5K 1/16W	[M]
R457	ERJ3GEYJ123V	12K 1/16W	[M]
R458	ERJ3GEYJ224V	220K 1/16W	[M]
R459	ERJ3GEYJ152V	1.5K 1/16W	[M]
R460	ERJ3GEYJ471V	470 1/16W	[M]
R501	ERDS2TJ103T	10K 1/4W	[M]
R502	ERDS2TJ223T	22K 1/4W	[M]
R503	ERDS2TJ123T	12K 1/4W	[M]
R504	ERDS2TJ473T	47K 1/4W	[M]
R505	ERDS2TJ473T	47K 1/4W	[M]
R506	ERDS2TJ104T	100K 1/4W	[M]
R507	ERDS1FVJ331T	330 1/2W	[M]
R508	ERDS1FVJ331T	330 1/2W	[M]
R509	ERDS1FVJ331T	330 1/2W	[M]
R510	ERDS2TJ272T	2.7K 1/4W	[M]
R511	ERDS2TJ561T	560 1/4W	[M]
R512	ERDS2TJ272T	2.7K 1/4W	[M]
R513	ERDS2TJ332T	3.3K 1/4W	[M]
R514	ERDS2TJ332T	3.3K 1/4W	[M]
R515	ERDS1FVJ270T	27 1/2W	[M]
R516	ERDS1FVJ150T	15 1/2W	[M]
R517	ERDS1FVJ2R7T	2.7 1/2W	[M]
R518	ERDS1FVJ2R7T	2.7 1/2W	[M]
R519	ERDS1FVJ2R7T	2.7 1/2W	[M]
R520	ERDS1FVJ2R7T	2.7 1/2W	[M]
R521	ERDS1FVJ2R7T	2.7 1/2W	[M]
R522	ERDS2TJ332T	3.3K 1/4W	[M]
R523	ERDS2TJ471T	470 1/4W	[M]
R524	ERDS2TJ2R2T	2.2 1/4W	[M]
R525	ERDS2TJ2R2T	2.2 1/4W	[M]
R526	ERDS2TJ2R2T	2.2 1/4W	[M]
R527	ERDS2TJ2R2T	2.2 1/4W	[M]
R528	ERDS2TJ103T	10K 1/4W	[M]
R529	ERDS1FVJ331T	330 1/2W	[M]
R530	ERDS2TJ122T	1.2K 1/4W	[M]
R531	ERDS2TJ222T	2.2K 1/4W	[M]
R532	ERDS2TJ151T	150 1/4W	[M]
R553	ERDS2TJ224T	220K 1/4W	[M]
R554	ERDS2TJ103T	10K 1/4W	[M]
R555	ERDS2TJ223T	22K 1/4W	[M]
R556	ERDS2TJ103T	10K 1/4W	[M]
R557	ERDS2TJ223T	22K 1/4W	[M]
R600	ERDS2TJ472T	4.7K 1/4W	[M]
R601	ERDS2TJ102T	1K 1/4W	[M]
R602	ERDS2TJ102T	1K 1/4W	[M]
R603	ERDS2TJ122T	1.2K 1/4W	[M]
R604	ERDS2TJ182T	1.8K 1/4W	[M]
R605	ERDS2TJ222T	2.2K 1/4W	[M]
R606	ERDS2TJ272T	2.7K 1/4W	[M]
R607	ERDS2TJ472T	4.7K 1/4W	[M]
R608	ERDS2TJ682T	6.8K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R609	ERDS2TJ103T	10K 1/4W	[M]
R610	ERDS2TJ223T	22K 1/4W	[M]
R612	ERDS2TJ102T	1K 1/4W	[M]
R613	ERDS2TJ102T	1K 1/4W	[M]
R614	ERDS2TJ122T	1.2K 1/4W	[M]
R615	ERDS2TJ182T	1.8K 1/4W	[M]
R616	ERDS2TJ222T	2.2K 1/4W	[M]
R617	ERDS2TJ272T	2.7K 1/4W	[M]
R618	ERDS2TJ472T	4.7K 1/4W	[M]
R619	ERDS2TJ682T	6.8K 1/4W	[M]
R620	ERDS2TJ103T	10K 1/4W	[M]
R629	ERDS2TJ273T	27K 1/4W	[M]
R634	ERDS2TJ103T	10K 1/4W	[M]
R635	ERDS2TJ103T	10K 1/4W	[M]
R648	ERDS2TJ471T	470 1/4W	[M]
R649	ERDS2TJ103T	10K 1/4W	[M]
R650	ERDS2TJ471T	470 1/4W	[M]
R651	ERDS2TJ471T	470 1/4W	[M]
R652	ERDS2TJ471T	470 1/4W	[M]
R688	ERDS2TJ2R7T	2.7 1/4W	[M]
R689	ERDS2TJ223T	22K 1/4W	[M]
R691	ERDS2TJ470T	47 1/4W	[M]
R692	ERD2FCVG470T	47 1/4W	[M]
R693	ERD2FCVG470T	47 1/4W	[M]
R698	ERDS2TJ102T	1K 1/4W	[M]
R699	ERDS2TJ102T	1K 1/4W	[M]
R700	ERDS2TJ2R7T	2.7 1/4W	[M]
R701	D0GB4R7JA008	4.7 1/16W	[M]
R701	ERDS2TJ223T	22K 1/4W	[M]
R702	ERDS2TJ152T	1.5K 1/16W	[M]
R702	ERJ3GEYJ103V	10K 1/16W	[M]
R704	ERJ3GEYJ102V	1K 1/16W	[M]
R705	D0GB154JA002	150K 1/16W	[M]
R706	ERJ3GEYJ102V	1K 1/16W	[M]
R707	ERJ3GEYJ102V	1K 1/16W	[M]
R708	ERJ3GEYJ102V	1K 1/16W	[M]
R709	ERJ3GEYJ223V	22K 1/16W	[M]
R711	ERJ3GEYJ823V	82K 1/16W	[M]
R712	ERJ3GEYJ561V	560 1/16W	[M]
R714	ERJ3GEYJ221V	220 1/16W	[M]
R715	D0GB272JA002	2.7K 1/16W	[M]
R717	ERJ3GEYJ102V	1K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R720	D0GB105JA002	1M 1/16W	[M]
R721	D0GB101JA002	100 1/16W	[M]
R723	D0GB562JA002	5.6K 1/16W	[M]
R725	ERJ3GEYJ561V	560 1/16W	[M]
R727	D0GB152JA002	1.5K 1/16W	[M]
R728	ERJ3GEYJ153V	15K 1/16W	[M]
R729	D0GB152JA002	1.5K 1/16W	[M]
R731	ERJ3GEYJ223V	22K 1/16W	[M]
R735	D0GB101JA002	100 1/16W	[M]
R736	D0GB100JA002	10 1/16W	[M]
R737	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R744	D0GB124JA002	120K 1/16W	[M]
R749	ERJ3GEYJ223V	22K 1/16W	[M]
R750	ERJ3GEYJ5R6V	5.6 1/16W	[M]
R753	D0GB100JA002	10 1/16W	[M]
R760	D0GB101JA002	100 1/16W	[M]
R801	ERJ3GEYJ106V	10M 1/16W	[M]
R802	ERJ3GEYJ223V	22K 1/16W	[M]
R803	ERJ3GEYJ223V	22K 1/16W	[M]
R804	ERJ3GEYJ334V	330K 1/16W	[M]
R805	ERJ3GEYJ472V	4.7K 1/16W	[M]
R806	ERJ3GEYJ472V	4.7K 1/16W	[M]
R807	ERJ3GEYJ681V	680 1/16W	[M]
R808	ERJ3GEYJ473V	47K 1/16W	[M]
R809	ERJ3GEYJ473V	47K 1/16W	[M]
R810	ERJ3GEYJ472V	4.7K 1/16W	[M]
R811	ERJ3GEYJ472V	4.7K 1/16W	[M]
R812	ERJ3GEYJ472V	4.7K 1/16W	[M]
R813	ERJ3GEYJ472V	4.7K 1/16W	[M]
R814	ERJ3GEYJ472V	4.7K 1/16W	[M]
R815	ERJ3GEYJ474V	470K 1/16W	[M]
R816	ERJ3GEYJ474V	470K 1/16W	[M]
R817	ERJ3GEYJ681V	680 1/16W	[M]
R818	ERJ3GEYJ222V	2.2K 1/16W	[M]
R819	ERJ3GEYJ222V	2.2K 1/16W	[M]
R820	ERJ3GEYJ471V	470 1/16W	[M]
R821	ERJ3GEY0R00V	0 1/16W	[M]
R822	ERJ3GEY0R00V	0 1/16W	[M]
R823	ERJ3GEY0R00V	0 1/16W	[M]
R824	ERJ3GEY0R00V	0 1/16W	[M]
R826	ERJ3GEYJ333V	33K 1/16W	[M]
R827	ERJ3GEYJ333V	33K 1/16W	[M]
R828	ERJ3GEYJ333V	33K 1/16W	[M]
R829	ERJ3GEYJ333V	33K 1/16W	[M]
R830	ERJ3GEY0R00V	0 1/16W	[M]
R832	ERJ3GEY0R00V	0 1/16W	[M]
R833	ERJ3GEY0R00V	0 1/16W	[M]
R834	ERJ3GEYJ472V	4.7K 1/16W	[M]
R835	ERJ3GEY0R00V	0 1/16W	[M]
R836	ERJ3GEY0R00V	0 1/16W	[M]
R900	ERDS2TJ103T	10K 1/4W	[M]
R901	ERDS2TJ102T	1K 1/4W	[M]
R902	ERDS2TJ102T	1K 1/4W	[M]
R903	ERDS2TJ122T	1.2K 1/4W	[M]
R904	ERDS2TJ182T	1.8K 1/4W	[M]
R905	ERDS2TJ222T	2.2K 1/4W	[M]
R906	ERDS2TJ272T	2.7K 1/4W	[M]
R907	ERDS2TJ472T	4.7K 1/4W	[M]
R908	ERDS2TJ682T	6.8K 1/4W	[M]
R909	ERDS2TJ103T	10K 1/4W	[M]
R910	ERDS2TJ223T	22K 1/4W	[M]
R911	ERDS2TJ104T	100K 1/4W	[M]
R912	ERDS2TJ473T	47K 1/4W	[M]
R913	ERDS2TJ473T	47K 1/4W	[M]
R914	ERDS2TJ563T	56K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R915	ERDS2TJ470T	47 1/4W	[M]
R916	ERDS2TJ104T	100K 1/4W	[M]
R917	ERDS2TJ563T	56K 1/4W	[M]
R918	ERDS2TJ470T	47 1/4W	[M]
R919	ERDS2TJ103T	10K 1/4W	[M]
R920	ERDS2TJ103T	10K 1/4W	[M]
R921	ERDS2TJ103T	10K 1/4W	[M]
R922	ERDS2TJ103T	10K 1/4W	[M]
R951	ERDS2TJ332T	3.3K 1/4W	[M]
R952	ERDS2TJ222T	2.2K 1/4W	[M]
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ151T	150 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R954	ERDS1FVJ100T	10 1/2W	[M]
R955	ERDS1FVJ100T	10 1/2W	[M]
R956	ERDS1FVJ100T	10 1/2W	[M]
R957	ERDS2TJ103T	10K 1/4W	[M]
R958	ERDS2TJ103T	10K 1/4W	[M]
R959	ERD2FCVJ4R7T	4.7 1/4W	[M]
R960	ERDS2TJ472T	4.7K 1/4W	[M]
R961	ERDS2TJ151T	150 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R975	ERDS2TJ821T	820 1/4W	[M]
R1001	ERJ3GEYJ1R0V	1 1/16W	[M]
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1005	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1006	ERJ3GEYJ102V	1K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1009	ERJ3GEYJ183V	18K 1/16W	[M]
R1010	ERJ3GEYJ183V	18K 1/16W	[M]
R1011	ERJ3GEYJ103V	10K 1/16W	[M]
R1012	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1013	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1014	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1015	ERJ3GEYJ470V	47 1/16W	[M]
R1016	ERJ3GEYJ470V	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1019	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1030	ERJ3GEYJ101V	100 1/16W	[M]
R1031	ERJ3GEYJ273V	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1038	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1039	ERJ3GEYJ153V	15K 1/16W	[M]
R1040	ERJ3GEY0R00V	0 1/16W	[M]
R1045	ERJ3GEYJ104V	100K 1/16W	[M]
R1046	ERJ3GEYJ104V	100K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1047	ERJ3GEYJ102V	1K 1/16W	[M]
R1048	ERJ3GEYJ102V	1K 1/16W	[M]
R1049	ERJ3GEYJ105V	1M 1/16W	[M]
R1050	ERJ3GEYJ105V	1M 1/16W	[M]
R1051	ERJ3GEYJ221V	220 1/16W	[M]
R1052	ERJ3GEYJ221V	220 1/16W	[M]
R1053	ERJ3GEYJ681V	680 1/16W	[M]
R1054	ERJ3GEYJ681V	680 1/16W	[M]
R1055	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1056	ERJ3GEYJ221V	220 1/16W	[M]
R1057	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1058	ERJ3GEYJ272V	2.7K 1/16W	[M]
R1059	ERJ3GEYJ103V	10K 1/16W	[M]
R1060	ERJ3GEYJ391V	390 1/16W	[M]
R1061	ERJ3GEY0R00V	0 1/16W	[M]
R1084	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1085	ERJ3GEYJ473V	47K 1/16W	[M]
R1086	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1087	ERJ3GEYJ473V	47K 1/16W	[M]
R1090	ERJ3GEYJ221V	220 1/16W	[M]
R1091	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1092	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1093	ERJ3GEYJ102V	1K 1/16W	[M]
R1094	ERJ3GEYJ102V	1K 1/16W	[M]
R1095	ERJ3GEYJ104V	100K 1/16W	[M]
R1096	ERJ3GEYJ104V	100K 1/16W	[M]
R1097	ERJ3GEYJ103V	10K 1/16W	[M]
R1098	ERJ3GEYJ103V	10K 1/16W	[M]
		CAPACITORS	
C1	ECEA1CKA101B	100 16V	[M]
C2	ECBT1E103ZF5	0.01 25V	[M]
C101	ECUV1E103KBV	0.01 25V	[M]
C102	ECEA1CKA101B	100 16V	[M]
C103	ECUV1E103KBV	0.01 25V	[M]
C104	F1H1H102A009	1000P 50V	[MAVD]
C105	F1H1H102A009	1000P 50V	[MAVD]
C106	ECUV1E103KBV	0.01 25V	[M]
C107	ECUV1E473ZFV	0.047 25V	[M]
C108	ECJ1VC1H080D	8P 50V	[MAVD]
C109	F1H1H102A009	1000P 50V	[MAVD]
C110	ECUV1E103KBV	0.01 25V	[M]
C111	ECEA1HKA4R7B	4.7 50V	[M]
C112	ECJ1VB1E103K	0.01 25V	[M]
C113	F1H1H102A009	1000P 50V	[MAVD]
C114	ECEA1HKA3R3B	3.3 50V	[M]
C115	ECEA1HKA4R7B	4.7 50V	[M]
C116	ECUV1C333KBV	0.033 16V	[M]
C117	ECUV1E103KBV	0.01 25V	[M]
C118	ECUV1E103KBV	0.01 25V	[M]
C119	F0A2A561A015	560P 100V	[MAVD]
C120	ECEA1CKA100B	10 16V	[M]
C121	ECEA1HKAR47B	0.47 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C122	ECEA1HKA010B	1 50V	[M]
C123	ECEA1HKA010B	1 50V	[M]
C124	ECJ1VC1H101K	100P 50V	[M]
C125	ECEA1CKA220B	22 16V	[M]
C126	ECJ2VF1C105Z	1 16V	[M]
C127	ECEA1CKA220B	22 16V	[M]
C129	ECEA0JKA101B	100 6.3V	[M]
C130	ECEA0JKA101B	100 6.3V	[M]
C131	F1H1H101A736	100P 50V	[MAVD]
C132	F1H1H102A009	1000P 50V	[MAVD]
C133	F1H1H270A230	27P 50V	[MAVD]
C134	F1H1H270A230	27P 50V	[MAVD]
C136	F1H1H102A009	1000P 50V	[MAVD]
C137	ECJ1VB1H332K	3300P 50V	[M]
C138	ECUV1E103KBV	0.01 25V	[M]
C139	ECEA1HKA4R7B	4.7 50V	[M]
C141	ECEA1HKA010B	1 50V	[M]
C142	ECEA1HKA010B	1 50V	[M]
C143	F1H1H472A219	4700P 50V	[M]
C144	F1H1H472A219	4700P 50V	[M]
C147	F1H1H102A009	1000P 50V	[MAVD]
C148	ECUV1E103KBV	0.01 25V	[M]
C149	F1H1C1040004	0.1 16V	[MAVD]
C201	ECJ1VB1H681K	680P 50V	[M]
C202	ECJ1VC1H101K	100P 50V	[M]
C203	F1H1H102A009	1000P 50V	[MAVD]
C204	ECJ1VB1H221K	220P 50V	[M]
C205	ECJ1VB1H221K	220P 50V	[M]
C206	ECEA1CKA100B	10 16V	[M]
C207	ECEA1CKA100B	10 16V	[M]
C208	ECEA1CKA100B	10 16V	[M]
C209	ECEA1CKA100B	10 16V	[M]
C211	ECEA1CKA100B	10 16V	[M]
C212	ECEA1CKA100B	10 16V	[M]
C213	ECEA1HKAR47B	0.47 50V	[M]
C214	ECEA1HKAR47B	0.47 50V	[M]
C215	ECJ2VB1C154K	0.15 16V	[M]
C216	ECJ2VB1C154K	0.15 16V	[M]
C217	F1H1H152A219	1500P 50V	[M]
C218	ECEA1CKA100B	10 16V	[M]
C219	ECQV1H474JZ3	0.47 50V	[M]
C220	ECQV1H474JZ3	0.47 50V	[M]
C221	ECEA1CKA100B	10 16V	[M]
C222	F1H1C473A071	0.047 16V	[MAVD]
C223	ECJ1VC1H101K	100P 50V	[M]
C224	ECEA1HKA010B	1 50V	[M]
C225	ECJ1VC1H101K	100P 50V	[M]
C226	F1H1H470A230	47P 50V	[MAVD]
C227	ECEA1CKA100B	10 16V	[M]
C228	ECEA1CKA100B	10 16V	[M]
C229	ECEA1HKA010B	1 50V	[M]
C230	ECJ1VB1H153K	0.015 50V	[MAVD]
C231	ECJ1VC1H821J	820P 50V	[MAVD]
C232	ECJ1VB1H822K	8200P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C233	ECJ1VB1H822K	8200P 50V	[M]
C234	ECEA1HKA010B	1 50V	[M]
C235	ECEA1HKAR68B	0.68 50V	[M]
C238	ECEA1CKA330B	33 16V	[M]
C239	F1H1H333A748	0.033 50V	[MAVD]
C240	ECBT1H821KB5	820P 50V	[M]
C240	F1H1H102A009	1000P 50V	[MAVD]
C241	ECBT1H150JC5	15P 50V	[M]
C241	F1H1H333A748	0.033 50V	[MAVD]
C242	ECBT1H821KB5	820P 50V	[M]
C243	ECBT1H150JC5	15P 50V	[M]
C244	ECBT1H473KB5	0.047 50V	[M]
C245	ECBT1H473KB5	0.047 50V	[M]
C246	ECBT1H473KB5	0.047 50V	[M]
C247	ECBT1H473KB5	0.047 50V	[M]
C248	ECBT1C472KR5	4700P 16V	[M]
C301	F1H1H102A009	1000P 50V	[MAVD]
C302	ECUV1E103KBV	0.01 25V	[M]
C303	F1H1H102A009	1000P 50V	[MAVD]
C304	ECEA1HKA010B	1 50V	[M]
C305	ECEA1CKA221B	220 16V	[M]
C306	ECEA1HKA010B	1 50V	[M]
C307	ECJ1VC1H121J	120P 50V	[M]
C308	ECJ1VC1H101K	100P 50V	[M]
C309	ECEA1AKN100B	10 10V	[M]
C310	ECEA0JKA101B	100 6.3V	[M]
C311	ECEA0JKA101B	100 6.3V	[M]
C312	ECUV1E103KBV	0.01 25V	[M]
C313	ECUV1E103KBV	0.01 25V	[M]
C314	F1H1H103A748	0.01 50V	[MAVD]
C315	ECEA1HKA0R1B	0.1 50V	[M]
C316	ECEA1HKA0R1B	0.1 50V	[M]
C317	ECEA1HKA0R1B	0.1 50V	[M]
C318	ECEA1HKA0R1B	0.1 50V	[M]
C319	F1H1C104A071	0.1 16V	[MAVD]
C320	ECEA1AKA330B	33 10V	[M]
C321	F1H1H103A748	0.01 50V	[MAVD]
C322	F1H1H103A748	0.01 50V	[MAVD]
C323	F1H1C1040004	0.1 16V	[MAVD]
C324	F1H1C1040004	0.1 16V	[MAVD]
C325	ECJ1VC1H101K	100P 50V	[M]
C326	ECJ1VF1C474Z	0.47 16V	[M]
C327	F1H1H101A736	100P 50V	[MAVD]
C328	ECJ1VC1H101K	100P 50V	[M]
C329	ECJ1VC1H101K	100P 50V	[M]
C330	ECJ1VC1H101K	100P 50V	[M]
C331	ECJ1VC1H101K	100P 50V	[M]
C332	ECJ1VC1H101K	100P 50V	[M]
C333	ECJ1VC1H101K	100P 50V	[M]
C334	ECJ1VC1H101K	100P 50V	[M]
C335	ECJ1VC1H101K	100P 50V	[M]
C336	ECUV1H104KBV	0.1 50V	[M]
C337	ECJ1VC1H101K	100P 50V	[M]
C338	ECUV1E103KBV	0.01 25V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C339	ECUV1E103KBV	0.01 25V	[M]
C340	F1H1H101A736	100P 50V	[MAVD]
C341	F1H1H101A736	100P 50V	[MAVD]
C342	ECUV1E103KBV	0.01 25V	[M]
C343	ECJ1VC1H101K	100P 50V	[M]
C344	ECJ1VC1H101K	100P 50V	[M]
C345	ECJ1VC1H101K	100P 50V	[M]
C346	ECJ1VC1H101K	100P 50V	[M]
C347	ECJ1VC1H101K	100P 50V	[M]
C348	ECJ1VC1H101K	100P 50V	[M]
C349	ECJ1VC1H101K	100P 50V	[M]
C350	ECJ1VC1H101K	100P 50V	[M]
C351	ECJ1VC1H101K	100P 50V	[M]
C352	ECJ1VC1H101K	100P 50V	[M]
C353	ECJ1VC1H101K	100P 50V	[M]
C354	ECJ1VC1H101K	100P 50V	[M]
C355	ECJ1VC1H101K	100P 50V	[M]
C356	ECJ1VC1H101K	100P 50V	[M]
C357	ECJ1VC1H102J	1000P 50V	[M]
C358	F1H1H102A009	1000P 50V	[MAVD]
C359	F1H1H102A009	1000P 50V	[MAVD]
C360	F1H1C104A071	0.1 50V	[MAVD]
C361	F1H1H150A230	15P 50V	[MAVD]
C362	ECJ1VC1H180J	18P 50V	[M]
C363	ECUV1H223KBV	0.022 50V	[M]
C364	ECJ1VB1H331K	330P 50V	[M]
C365	ECJ1VB1H331K	330P 50V	[M]
C366	ECJ1VB1H331K	330P 50V	[M]
C367	F1H1H470A230	47P 50V	[MAVD]
C368	F1H1H470A230	47P 50V	[MAVD]
C369	ECJ1VC1H560J	56P 50V	[M]
C370	ECUV1E103KBV	0.01 25V	[M]
C371	ECUV1E103KBV	0.01 16V	[M]
C372	F2A1C221A019	220 16V	[MAVD]
C373	RCE1HKN100BG	10P 50V	[M]
C374	ECJ1VC1H560J	56P 50V	[M]
C375	F2A1H101A147	100 50V	[MAVD]
C376	ECUV1E103KBV	0.01 25V	[M]
C377	ECUV1E103KBV	0.01 25V	[M]
C378	ECEA1CKA100B	10 16V	[M]
C379	ECUV1H561KBV	560P 50V	[M]
C380	ECUV1H561KBV	560P 50V	[M]
C381	ECUV1H561KBV	560P 50V	[M]
C382	ECUV1H561KBV	560P 50V	[M]
C383	ECUV1H561KBV	560P 50V	[M]
C384	ECUV1H561KBV	560P 50V	[M]
C385	ECUV1H561KBV	560P 50V	[M]
C386	ECUV1H561KBV	560P 50V	[M]
C387	ECJ1VC1H680J	68P 50V	[M]
C388	ECJ1VC1H680J	68P 50V	[M]
C389	ECEA0JKA101B	100 6.3V	[M]
C390	ECEA0JKA470B	47 6.3V	[M]
C391	ECEA1AKA101B	100 10V	[M]
C392	ECEA1HKA010B	1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C393	ECEA1HKA100B	10 50V	[M]
C394	ECEA1HKA100B	10 50V	[M]
C395	ECEA1HKA100B	10 50V	[M]
C396	ECEA1HKA2R2B	2.2 50V	[M]
C397	RCE1AM102B	1000 10V	[M]
C398	F1H1H102A009	1000P 50V	[MAVD]
C399	ECEA0JKA101B	100 6.3V	[M]
C400	ECUV1H103KBV	0.01 50V	[M]
C401	ECJ1VB1H681K	680P 50V	[M]
C402	ECJ1VC1H101K	100P 50V	[M]
C403	F1H1H102A009	1000P 50V	[MAVD]
C404	ECJ1VB1H221K	220P 50V	[M]
C405	ECJ1VB1H221K	220P 50V	[M]
C406	ECEA1CKA100B	10 16V	[M]
C407	ECEA1CKA100B	10 16V	[M]
C408	ECEA1CKA100B	10 16V	[M]
C409	ECEA1CKA100B	10 16V	[M]
C410	F1H1A224A028	0.22 10V	[M]
C411	ECEA1CKA100B	10 16V	[M]
C412	ECEA1CKA100B	10 16V	[M]
C413	ECEA1HKAR47B	0.47 50V	[M]
C414	ECEA1HKAR47B	0.47 50V	[M]
C415	ECJ2VB1C154K	0.15 16V	[M]
C416	ECJ2VB1C154K	0.15 16V	[M]
C417	F1H1H152A219	1500P 50V	[M]
C418	ECEA1CKA100B	10 16V	[M]
C419	ECQV1H474JZ3	0.47 50V	[M]
C420	ECQV1H474JZ3	0.47 50V	[M]
C421	ECEA1CKA100B	10 16V	[M]
C422	F1H1C473A071	0.047 16V	[MAVD]
C423	ECJ1VC1H101K	100P 50V	[M]
C424	ECEA1HKA010B	1 50V	[M]
C425	ECJ1VC1H101K	100P 50V	[M]
C426	F1H1H470A230	47P 50V	[MAVD]
C427	ECEA1CKA100B	10 16V	[M]
C428	ECEA1CKA100B	10 16V	[M]
C429	ECEA1HKA010B	1 50V	[M]
C430	ECJ2VB1H153K	0.015 50V	[M]
C431	ECJ1VC1H821J	180P 50V	[MAVD]
C432	ECJ1VB1H822K	8200P 50V	[M]
C433	ECJ1VB1H822K	8200P 50V	[M]
C434	ECEA1HKA010B	1 50V	[M]
C435	ECEA1HKAR68B	0.68 50V	[M]
C438	ECEA1CKA330B	33 16V	[M]
C439	F1H1H333A748	0.033 50V	[MAVD]
C440	ECBT1H821KB5	820P 50V	[M]
C440	F1H1H102A009	1000P 50V	[MAVD]
C441	ECBT1H150JC5	15P 50V	[M]
C441	F1H1H333A748	0.033 50V	[MAVD]
C442	ECBT1H821KB5	820P 50V	[M]
C442	F1H1A224A028	0.22 10V	[M]
C443	ECBT1H150JC5	15P 50V	[M]
C443	ECUV1H104KBV	0.1 50V	[M]
C444	ECBT1H473KB5	0.047 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C445	ECBT1H473KB5	0.047 50V	[M]
C446	ECBT1H473KB5	0.047 50V	[M]
C447	ECBT1H473KB5	0.047 50V	[M]
C448	ECBT1H103KB5	0.01 50V	[M]
C501	ECBT1H103KB5	0.01 50V	[M]
C502	F2A1A331A140	330 10V	[MAVD]
C503	ECBT1H102KB5	1000P 50V	[M]
C504	ECKR1H103MD5	0.01 50V	[M]
C505	ECEA1CKA101B	100 16V	[M]
C506	ECKR1H103MD5	0.01 50V	[M]
C507	ECEA1CKA100B	10 16V	[M]
C508	ECEA1CKA100B	10 16V	[M]
C509	ECKR1H103MD5	0.01 50V	[M]
C510	F2A1E101A122	100 100V	[MAVD]
C511	ECKR1H103MD5	0.01 50V	[M]
C512	ECEA1EKA330B	33 25V	[M]
C513	ECEA1EKA100B	10 25V	[M]
C514	ECKR1H103MD5	0.01 50V	[M]
C520	ECA1JM222E	2200 63V	[MAVD]
C530	ECQV1H184JL3	0.18 50V	[M]
C538	ECEA1HKA2R2B	2.2 50V	[M]
C540	ECA1JM222E	2200 63V	[MAVD]
C613	F1D1H390A006	39P 50V	[M]
C619	ECBT1H473KB5	0.047 50V	[M]
C620	ECBT1E223ZF5	0.022 25V	[M]
C621	ECBT1E223ZF5	0.022 25V	[M]
C622	ECBT1H104KB5	0.1 50V	[M]
C637	ECBT1E103ZF5	0.01 25V	[M]
C638	ECBT1H102KB5	1000P 50V	[M]
C639	ECEA0JKA470B	47 6.3V	[M]
C640	ECEA1HKA3R3B	3.3 50V	[M]
C641	ECEA1VKA220B	22 35V	[M]
C642	ECEA1VKA220B	22 35V	[M]
C669	ECBT1H101KB5	100P 50V	[M]
C670	ECBT1H101KB5	100P 50V	[M]
C671	ECBT1E473ZF5	0.047 25V	[M]
C672	ECBT1H101KB5	100P 50V	[M]
C673	ECBT1H101KB5	100P 50V	[M]
C674	ECEA1EKA470B	47 25V	[M]
C675	F1E1H104A001	0.1 50V	[M]
C677	ECBT1H104KB5	0.1 50V	[M]
C678	ECBT1H103KB5	0.01 50V	[M]
C701	ECEA0JKA330I	33 6.3V	[M]
C702	ECUVNC104KBV	0.1 16V	[M]
C703	ECEA0JKA101I	100 6.3V	[M]
C704	ECUVNC104KBV	0.1 16V	[M]
C706	ECJ1VB1H272K	2700P 50V	[M]
C707	F1H1E273A064	0.027 25V	[M]
C710	F1H1H121A755	120P 50V	[M]
C711	ECJ1VB1C103K	0.01 16V	[M]
C712	ECJ1VB1C103K	0.01 16V	[M]
C713	ECUVNC104KBV	0.1 16V	[M]
C714	ECEA0JKA101I	100 6.3V	[M]
C715	ECUV1C224KBV	0.22 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C716	ECJ1VB1H102K	1000P 50V	[M]
C717	ECUVNC104ZFV	0.1 16V	[M]
C718	ECUV1A124KBV	0.12 10V	[M]
C721	ECJ1VC1H120J	12P 50V	[M]
C722	ECJ1VC1H120J	12P 50V	[M]
C723	ECEA0JKA221I	220 6.3V	[M]
C724	ECUVNC104KBV	0.1 16V	[M]
C725	ECJ1VB1H102K	1000P 50V	[M]
C726	ECJ1VB1H102K	1000P 50V	[M]
C727	ECA1HAK010XI	1 50V	[M]
C728	ECA1HAK010XI	1 50V	[M]
C729	ECUVNC104KBV	0.1 16V	[M]
C730	ECUVNC104ZFV	0.1 16V	[M]
C731	ECEA0JKA221I	220 6.3V	[M]
C733	ECUVNC104KBV	0.1 16V	[M]
C734	ECEA1AKA221I	220 10V	[M]
C735	ECUVNC104ZFV	0.1 16V	[M]
C736	ECUVNC104ZFV	0.1 16V	[M]
C737	ECUVNC104ZFV	0.1 16V	[M]
C738	F1H1C473A088	0.047 16V	[M]
C739	ECJ1VB1H103K	0.01 50V	[M]
C740	ECUVNC104KBV	0.1 16V	[M]
C741	ECJ1VB1H102K	1000P 50V	[M]
C742	F1H1E273A064	0.027 25V	[M]
C743	ECUVNC104ZFV	0.1 16V	[M]
C744	F1H1H223A761	0.022 50V	[M]
C746	ECUVNC104KBV	0.1 16V	[M]
C747	F1H1H181A755	180P 50V	[M]
C748	ECUVNC104KBV	0.1 16V	[M]
C749	ECJ1VB1H222K	2200P 50V	[M]
C750	ECUVNC104KBV	0.1 16V	[M]
C751	ECUVNC104KBV	0.1 16V	[M]
C752	ECJ1VB1H103K	0.01 50V	[M]
C753	ECJ1VB1H471K	470P 50V	[M]
C755	ECUVNC104KBV	0.1 16V	[M]
C756	ECEA1HKA4R7I	4.7 50V	[M]
C757	ECEA1HKA4R7I	4.7 50V	[M]
C758	ECUVNC104KBV	0.1 16V	[M]
C770	ECUVNC104KBV	0.1 16V	[M]
C780	ECUVNC104KBV	0.1 16V	[M]
C781	ECUVNC104KBV	0.1 16V	[M]
C782	ECUVNC104KBV	0.1 16V	[M]
C826	ECJ1VC1H101K	100P 50V	[M]
C827	ECJ1VC1H101K	100P 50V	[M]
C828	ECJ1VC1H101K	100P 50V	[M]
C829	ECJ1VC1H101K	100P 50V	[M]
C901	ECBT1H101KB5	100P 50V	[M]
C902	ECBT1H101KB5	100P 50V	[M]
C950	F2A1E222A121	2200 25V	[MAVD]
C951	ECKR1H103ZF5	0.01 50V	[M]
C952	ECEA1AKA470B	47 10V	[M]
C953	ECKR1H103MD5	0.01 50V	[M]
C954	ECKR1H103ZF5	0.01 50V	[M]
C955	F2A1H101A147	10 50V	[MAVD]

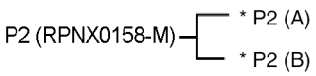
Ref. No.	Part No.	Part Name & Description	Remarks
C956	ECA1JM101B	100 63V	[M]
C957	VCEA2AEC100B	10 100V	[MAVD]
C958	ECKR1H103MD5	0.01 50V	[M]
C959	ECKR2H103ZF5	0.01 500V	[M]
C960	ECQE1104KF3	0.1 100V	[M]
C961	RCA1CM102BT	1000 16V	[M]
C963	ECEA1VKA4R7B	4.7 35V	[M]
C1001	F1H1H103A220	0.01 50V	[MAVD]
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1003	ECUV1H152KBV	1500P 50V	[M]
C1006	ECEA1HKA010B	1 50V	[M]
C1007	F0A2A472A015	4700P 100V	[M]
C1008	ECEA1HKA010B	1 50V	[M]
C1009	ECEA1AKA470B	47 10V	[M]
C1010	F2A1E101A122	100 25V	[MAVD]
C1011	ECQV1H473JZ3	0.047 50V	[M]
C1012	F1H1H102A009	1000P 50V	[MAVD]
C1013	F1H1H102A009	1000P 50V	[MAVD]
C1014	F1H1H102A009	1000P 50V	[MAVD]
C1015	F1H1H102A009	1000P 50V	[MAVD]
C1016	F1H1H222A219	2200P 50V	[MAVD]
C1017	F1H1H222A219	2200P 50V	[MAVD]
C1018	F1H1H103A748	0.01 50V	[MAVD]
C1019	F1H1H102A009	1000P 50V	[MAVD]
C1020	ECJ1VB1H471K	470P 50V	[M]
C1021	ECJ1VB1H471K	470P 50V	[M]
C1022	F1H1H102A009	1000P 50V	[MAVD]
C1023	F1H1H102A009	1000P 50V	[MAVD]
C1026	ECEA0JKA470B	47 6.3V	[M]
C1027	F1H1H102A009	1000P 50V	[MAVD]
C1030	ECEA1AKA101B	100 10V	[M]
C1031	ECEA1AKA101B	100 10V	[M]
C1032	F1C1C183A001	0.018 16V	[M]
C1033	F1C1C183A001	0.018 16V	[M]
C1034	ECEA1HKA3R3B	3.3 50V	[M]
C1035	ECEA1HKA3R3B	3.3 50V	[M]
C1036	ECUV1C333KBV	0.033 16V	[M]
C1037	ECEA1HKA3R3B	3.3 50V	[M]
C1038	ECJ1VB1H221K	220P 50V	[M]
C1039	ECJ1VB1H221K	220P 50V	[M]
C1040	F1H1H102A009	1000P 50V	[MAVD]
C1041	ECEA1CKA100B	10 16V	[M]
C1042	ECEA1CKA220B	22 16V	[M]
C1043	ECEA1HKA4R7B	4.7 50V	[M]
C1044	ECEA1AKA330B	33 10V	[M]
C1045	ECEA1AKA220B	22 10V	[M]
C1046	ECEA1AKA221Q	220 10V	[M]
C1047	ECEA1HKA010B	1 50V	[M]
C1048	ECEA1HKA010B	1 50V	[M]
C1049	F1H1H102A009	1000P 50V	[MAVD]
C1050	F1H1H102A009	1000P 50V	[MAVD]
C1051	ECEA1HKA010B	1 50V	[M]
C1052	ECEA1HKA010B	1 50V	[M]
C1053	F2A1C221A019	220 16V	[MAVD]

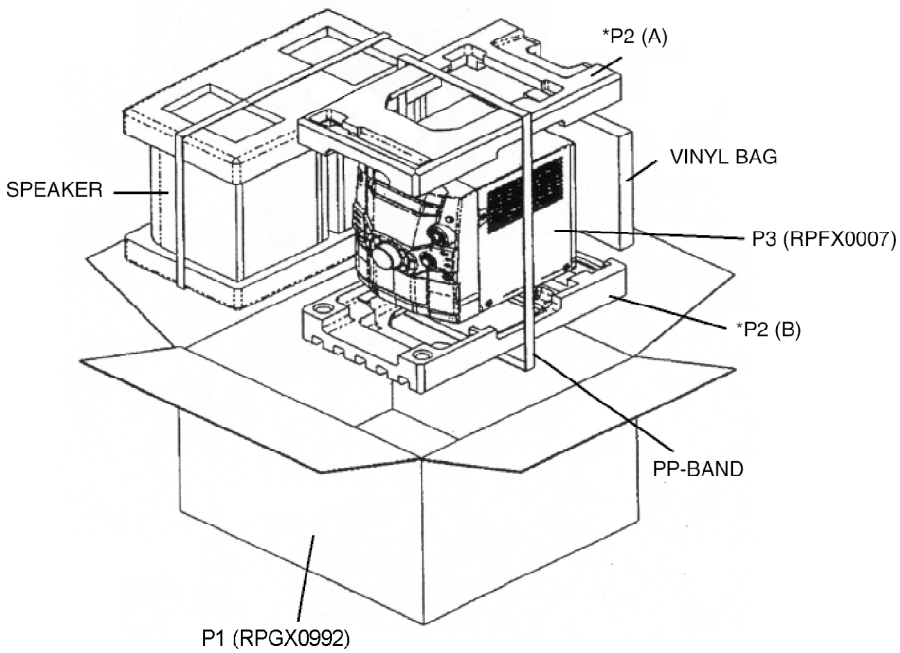
Ref. No.	Part No.	Part Name & Description	Remarks
C1054	ECEA1HKA3R3B	3.3 50V	[M]
C1055	ECEA1HKA0R1B	0.1 50V	[M]
C1056	ECEA1CKA100B	10 16V	[M]
C1057	F1H1H102A009	1000P 50V	[MAVD]
C1058	F1H1H102A009	1000P 50V	[MAVD]
C1064	ECEA1HKA3R3B	3.3 50V	[M]
		CHIP JUMPER	
RJ701	ERJ3GEY0R00V	0 1/16W	[M]
RJ702	ERJ3GEY0R00V	0 1/16W	[M]
RJ703	ERJ3GEY0R00V	0 1/16W	[M]
RJ704	ERJ3GEY0R00V	0 1/16W	[M]
RJ705	ERJ3GEY0R00V	0 1/16W	[M]
RJ706	ERJ3GEY0R00V	0 1/16W	[M]
RJ707	ERJ3GEY0R00V	0 1/16W	[M]
RJ708	ERJ3GEY0R00V	0 1/16W	[M]
RJ709	ERJ3GEY0R00V	0 1/16W	[M]
RJ711	ERJ3GEY0R00V	0 1/16W	[M]
RJ712	ERJ3GEY0R00V	0 1/16W	[M]
RJ713	ERJ3GEY0R00V	0 1/16W	[M]
RJ715	ERJ3GEY0R00V	0 1/16W	[M]
RJ716	ERJ3GEY0R00V	0 1/16W	[M]
RJ717	ERJ3GEY0R00V	0 1/16W	[M]
RJ718	ERJ3GEY0R00V	0 1/16W	[M]
RJ720	ERJ3GEY0R00V	0 1/16W	[M]
RJ721	ERJ3GEY0R00V	0 1/16W	[M]
RJ722	ERJ3GEY0R00V	0 1/16W	[M]
RJ723	ERJ3GEY0R00V	0 1/16W	[M]
RJ724	ERJ3GEY0R00V	0 1/16W	[M]
RJ725	ERJ3GEY0R00V	0 1/16W	[M]
RJ726	ERJ3GEY0R00V	0 1/16W	[M]
RJ727	ERJ3GEY0R00V	0 1/16W	[M]
RJ728	ERJ3GEY0R00V	0 1/16W	[M]
RJ729	ERJ3GEY0R00V	0 1/16W	[M]
RJ730	ERJ3GEY0R00V	0 1/16W	[M]
RJ731	ERJ3GEY0R00V	0 1/16W	[M]
RJ732	ERJ3GEY0R00V	0 1/16W	[M]
RJ733	ERJ3GEY0R00V	0 1/16W	[M]

21.5. Packing Materials& Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX0992	PACKING CASE	[MAVD]
P2	RPNX0158-M	POLYFOAM	[MAVD]
P3	RPFX0007	MIRAMAT BAG	[M]
		ACCESSORIES	
A1	EUR7710030	REMOTE CONTROL	[MAVD]
A1-1	UR64EC2337F	R/C BATTERY COVER	[M]
A2	RJA0043-1C	AC CORD	[M] ⚠ EG E
A2	RJA0044-3C	AC CORD	[M] ⚠ EB
A3	RQT6696-E	O/I BOOK (Sp/Po/Cz)	[MAVD]E
A3	RQT6697-D	O/I BOOK (Ge/It/Fr)	[MAVD]EG
A3	RQT6698-H	O/I BOOK (Du/Da/Sw)	[MAVD]EG
A3	RQT6699-B	O/I BOOK (En)	[M]EB E
A4	RSA0007-L	FM ANTENNA	[M]
A5	N1DADYY00002	AM LOOP ANTENNA	[M]
A6	SJP9009	ANTENNA ADAPTER	[M]EB

21.6. Packaging





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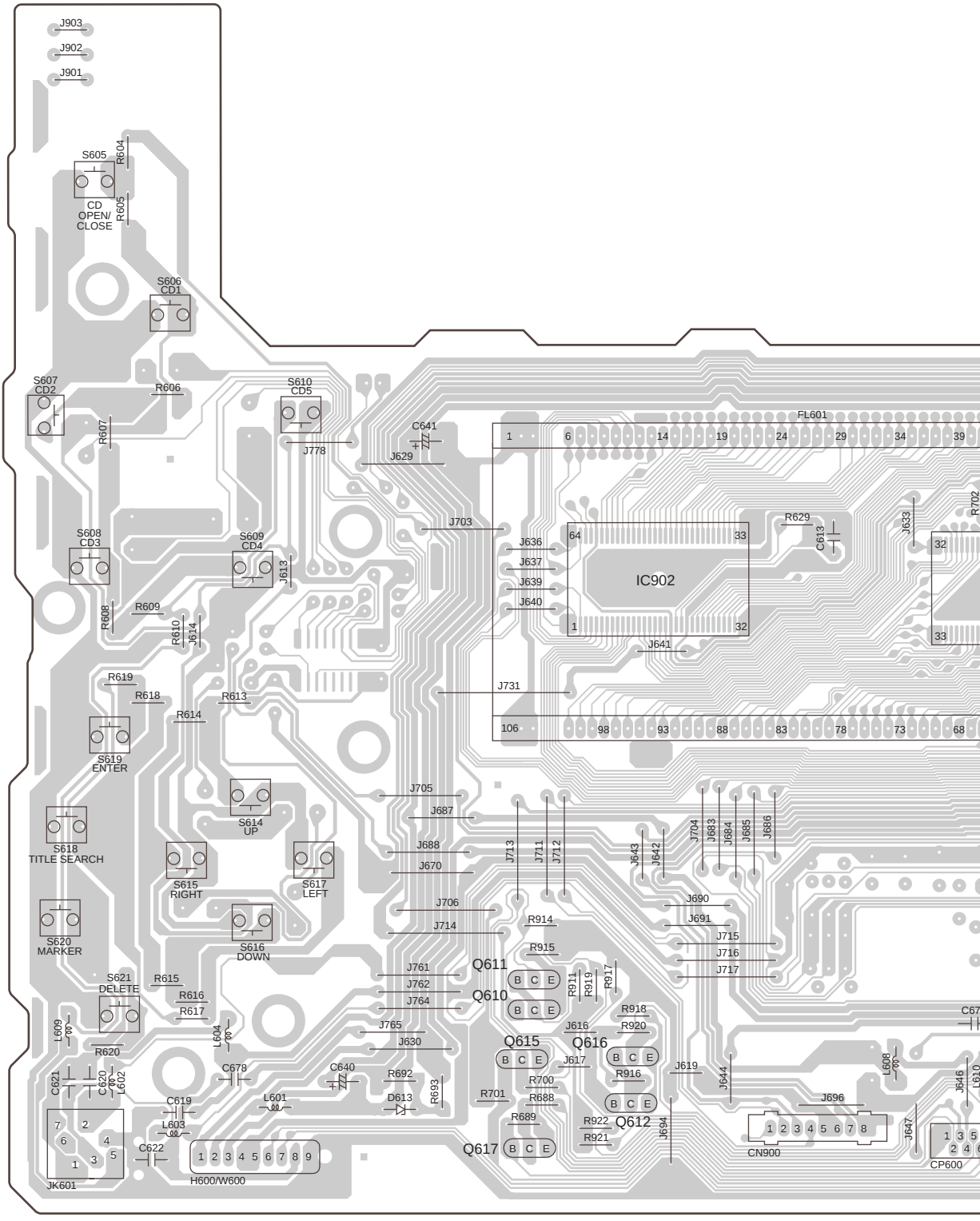
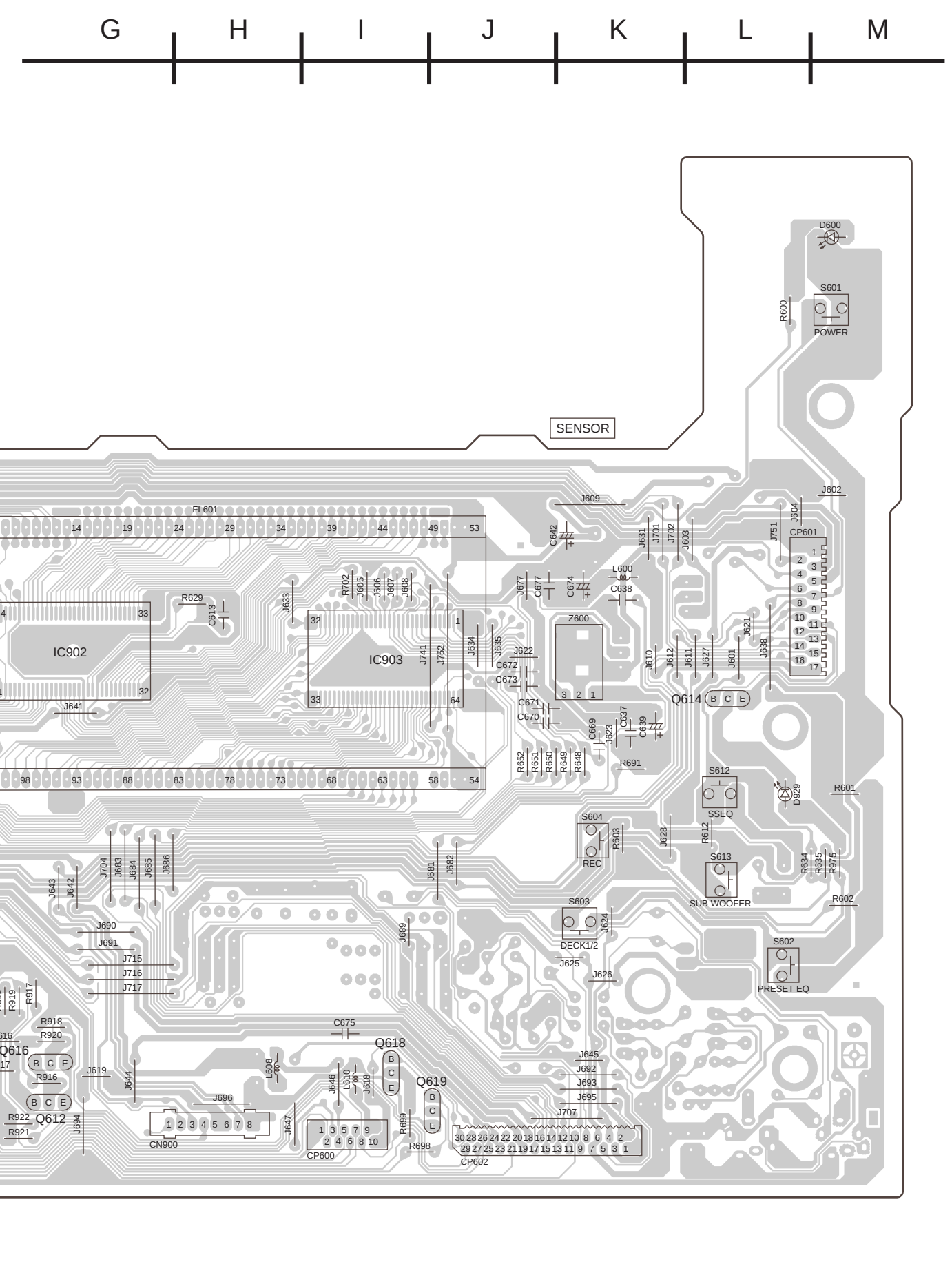
C PANEL P.C.B (REPX0356A)

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J702
J603
L600
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C677
C674
R702
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J633
IC902
IC903
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C673
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S602
PRESET EQ
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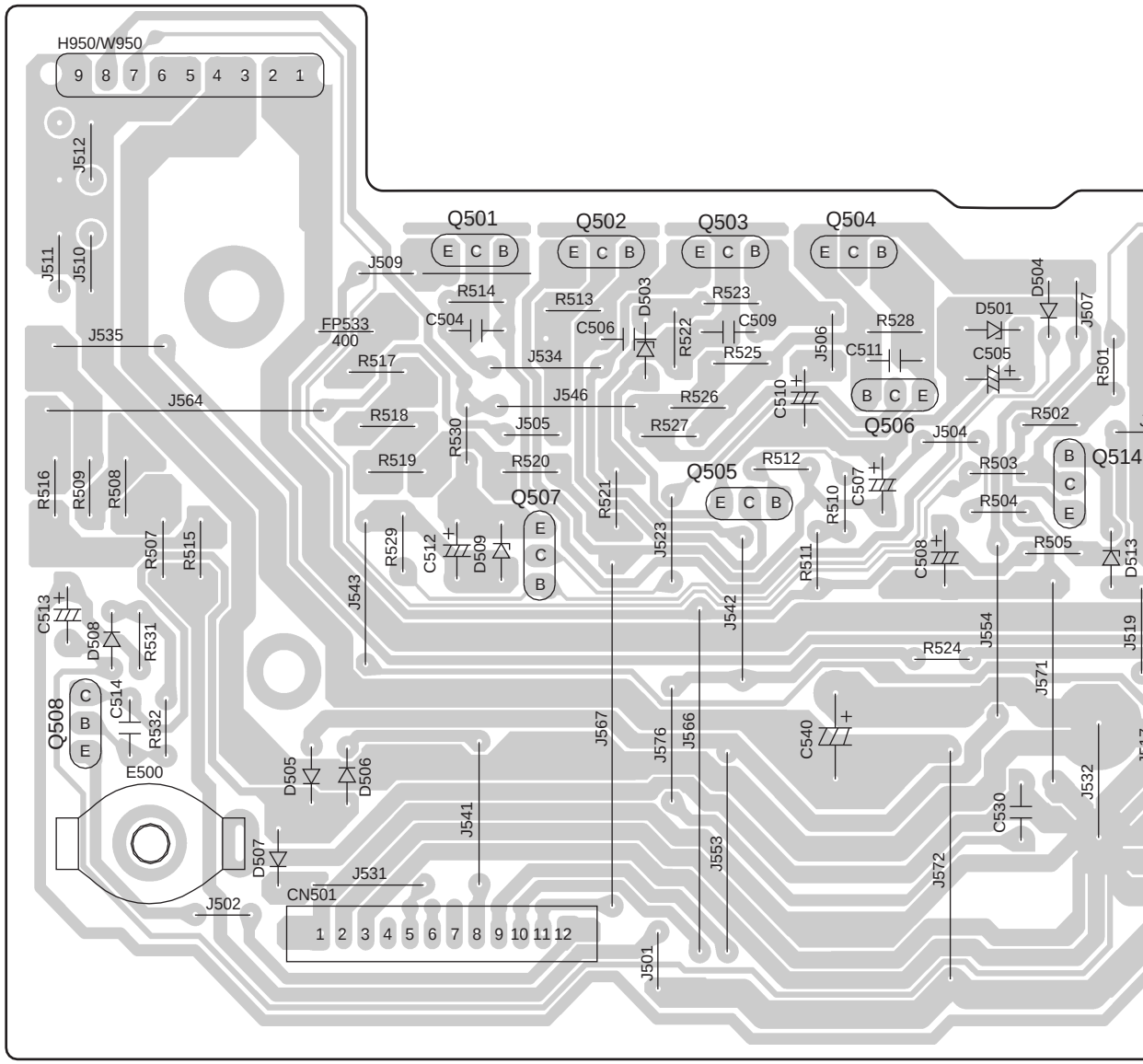
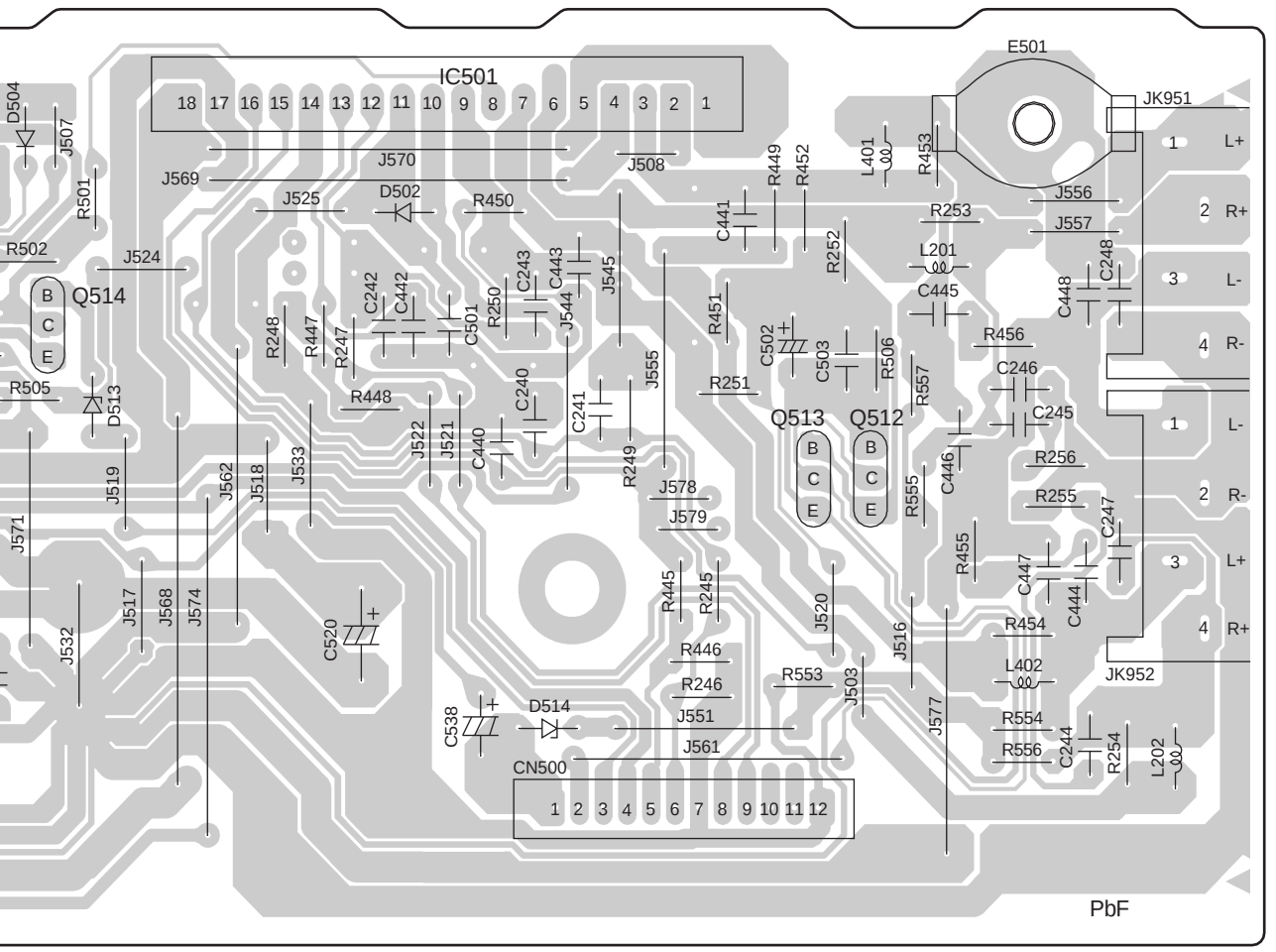
J644
J608
J646
J610
J618
Q619
J696
J645
J692
J693
J695
J707
R922
Q612
R921
J694
CN900
J647
CP600
R699
R698
CP602

I POWER P.C.B (REPX0368B)

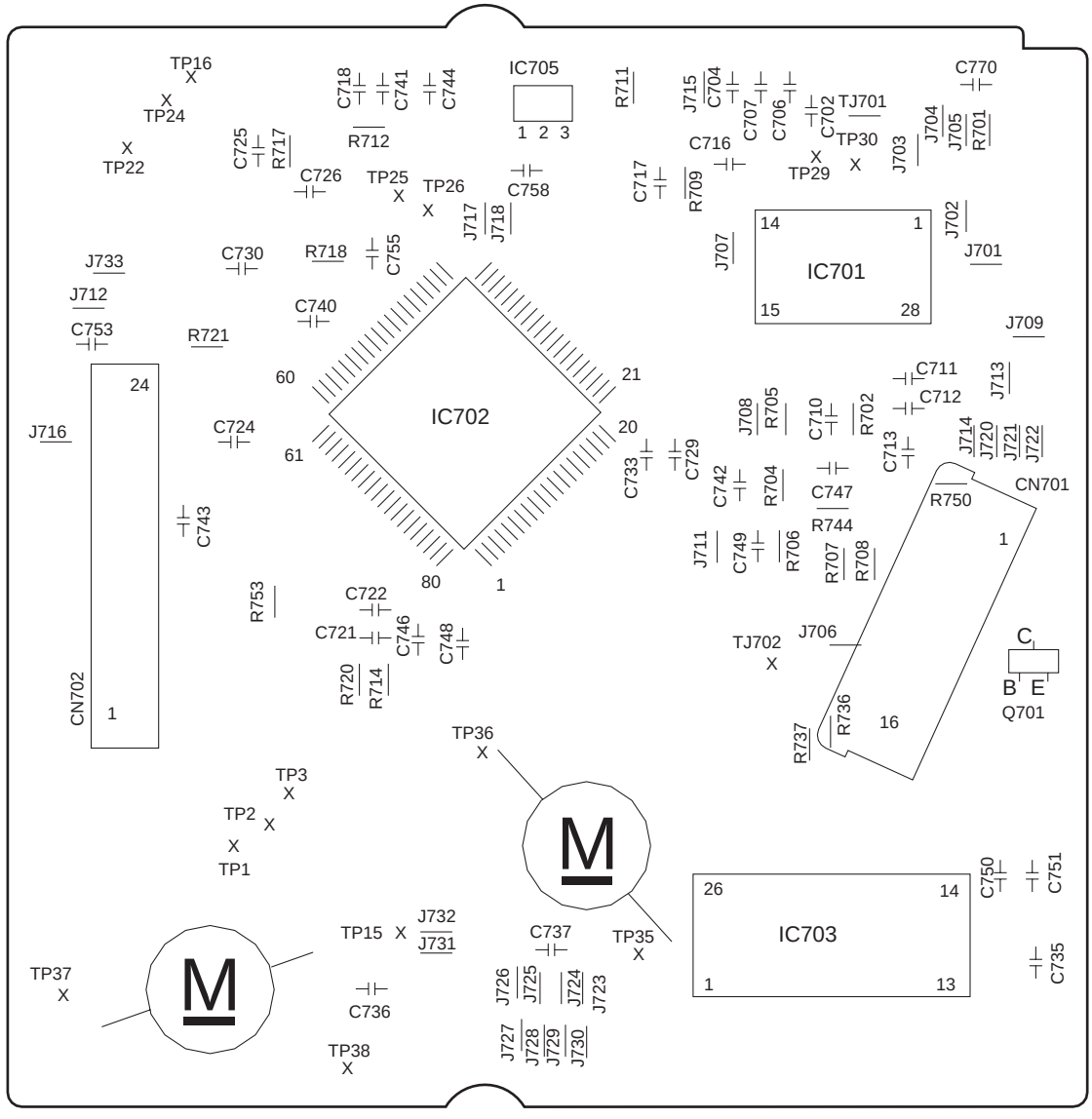



G
H
I
J
K
L
M
IC501
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
E501
JK951
1 L+
2 R+
3 L-
4 R-
JK952
1 L-
2 R-
3 L+
4 R+
HIGH CH SPEAKERS
LOW CH SPEAKERS
Q514
Q513
Q512
B C E
CN500
1 2 3 4 5 6 7 8 9 10 11 12
D504
D513
D502
D514
J507
J501
J569
J570
J508
J525
J524
J545
J544
J555
J578
J579
J551
J561
J562
J518
J533
J519
J571
J517
J568
J574
J532
J522
J521
J577
J516
J520
J503
R501
R502
R505
R450
R448
R248
R447
R247
R249
R251
R252
R253
R256
R255
R454
R455
R456
R557
R555
R553
R554
R556
R445
R245
R446
R246
C441
C442
C443
C501
C502
C503
C506
C240
C241
C440
C242
C243
C445
C446
C447
C448
C444
C246
C245
C247
C248
C520
C538
C244
R254
L401
L201
L402
L202
R453
R449
R452
PbF

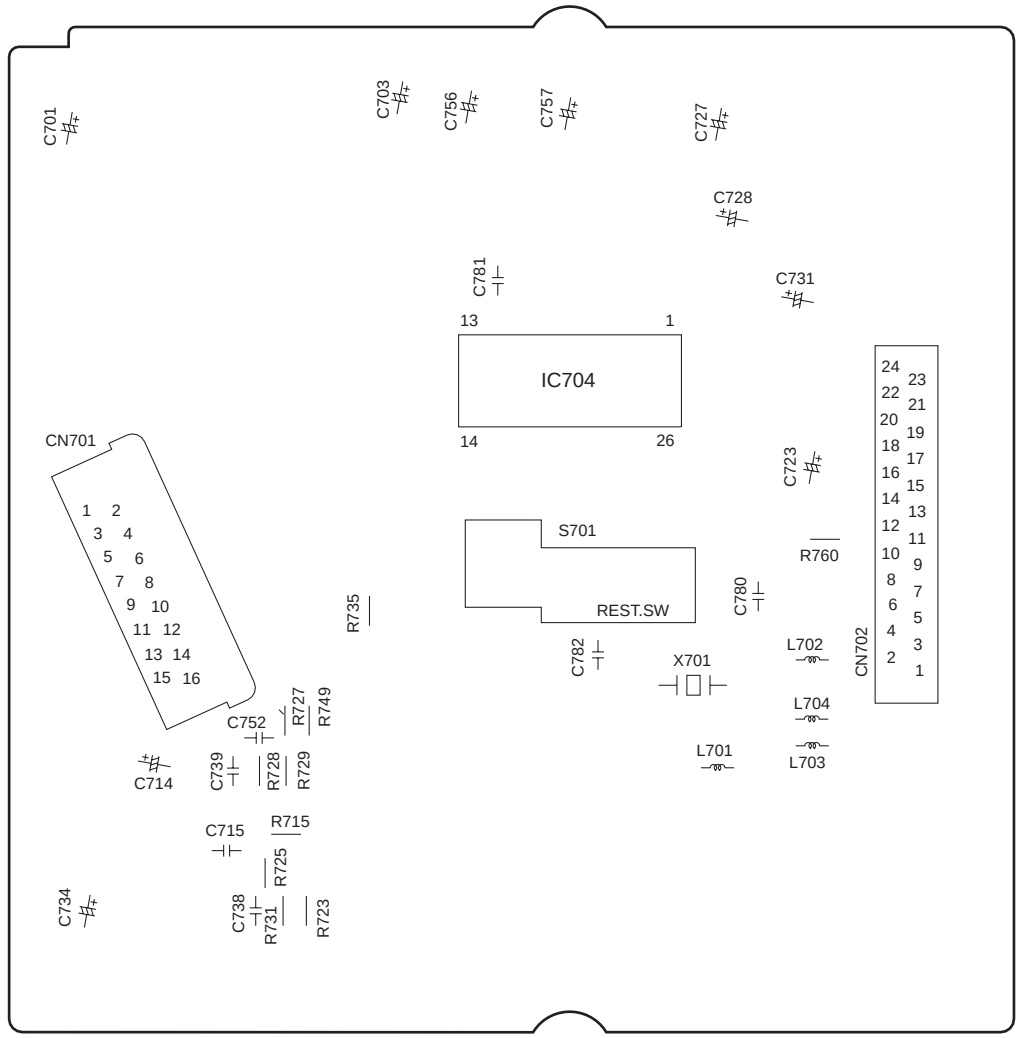
A B C D E F G

1 2 3 4 5 6 7 8 9

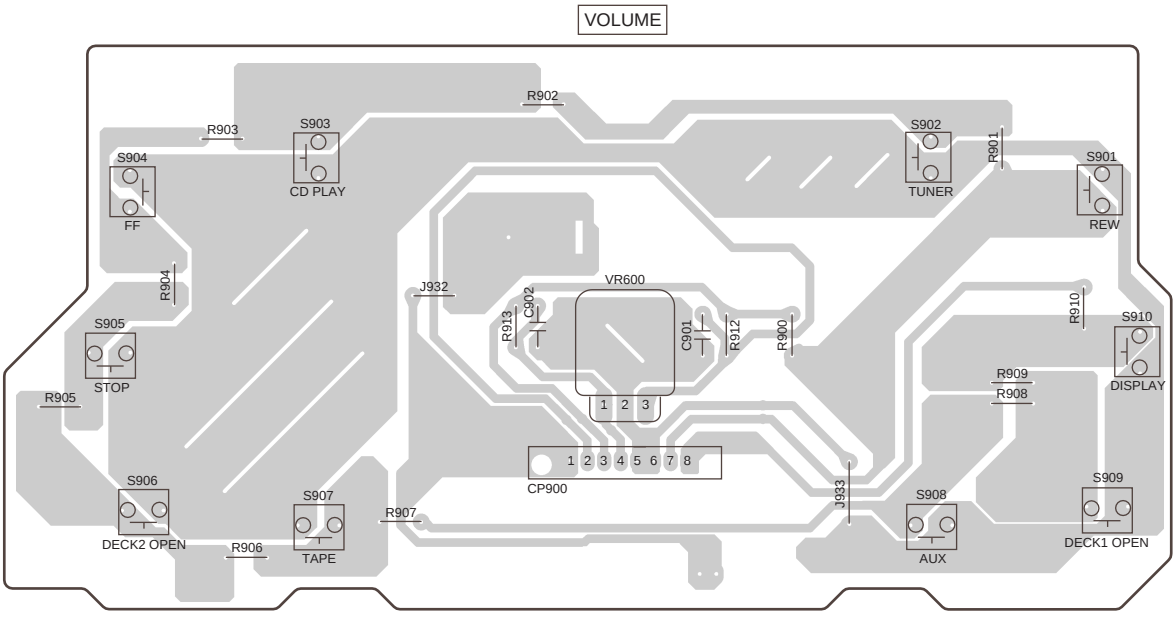
A CD SERVO P.C.B (Side: A) (REPX0295A)



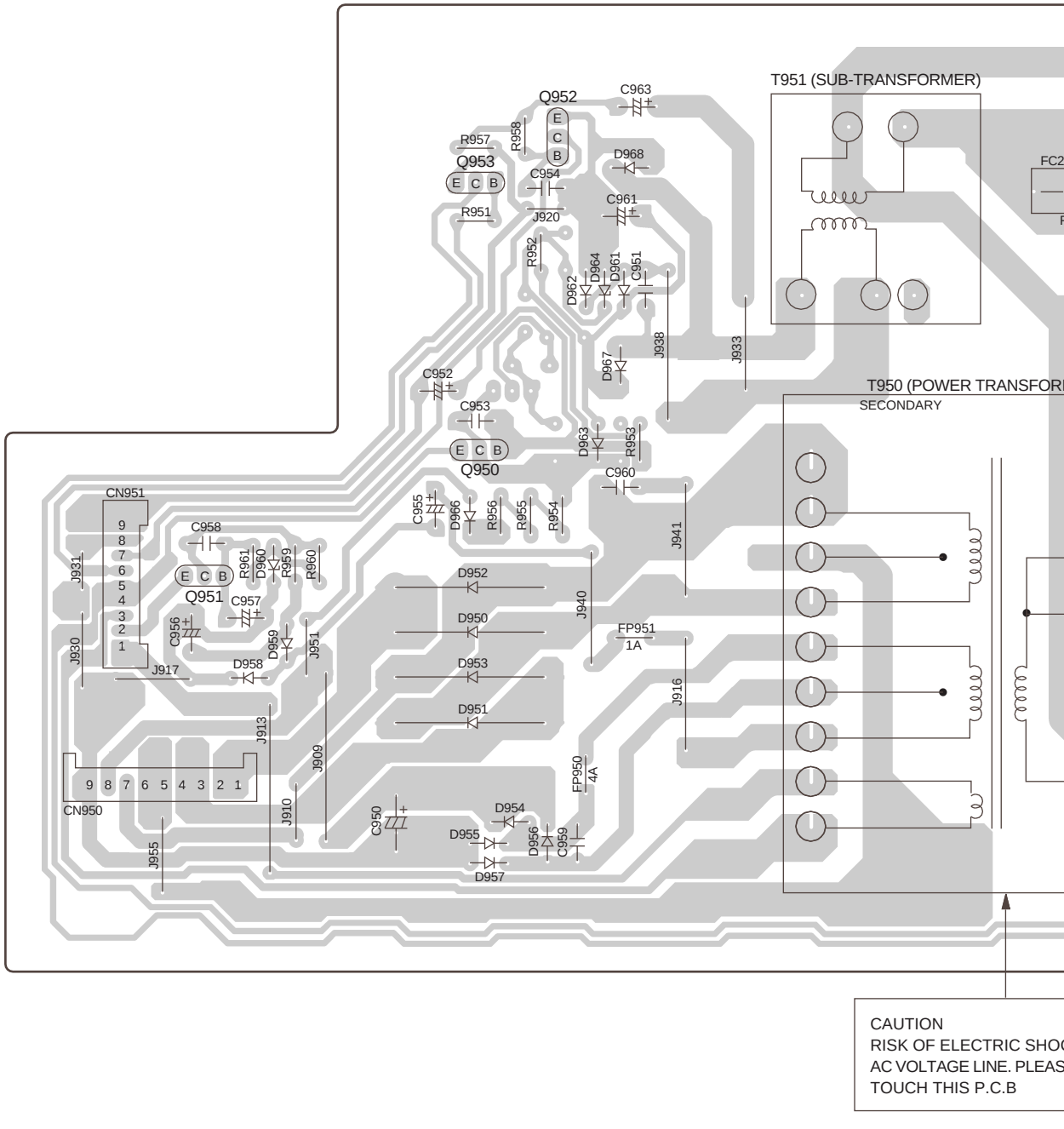
A CD SERVO P.C.B (Side: B) (REPX0295A)

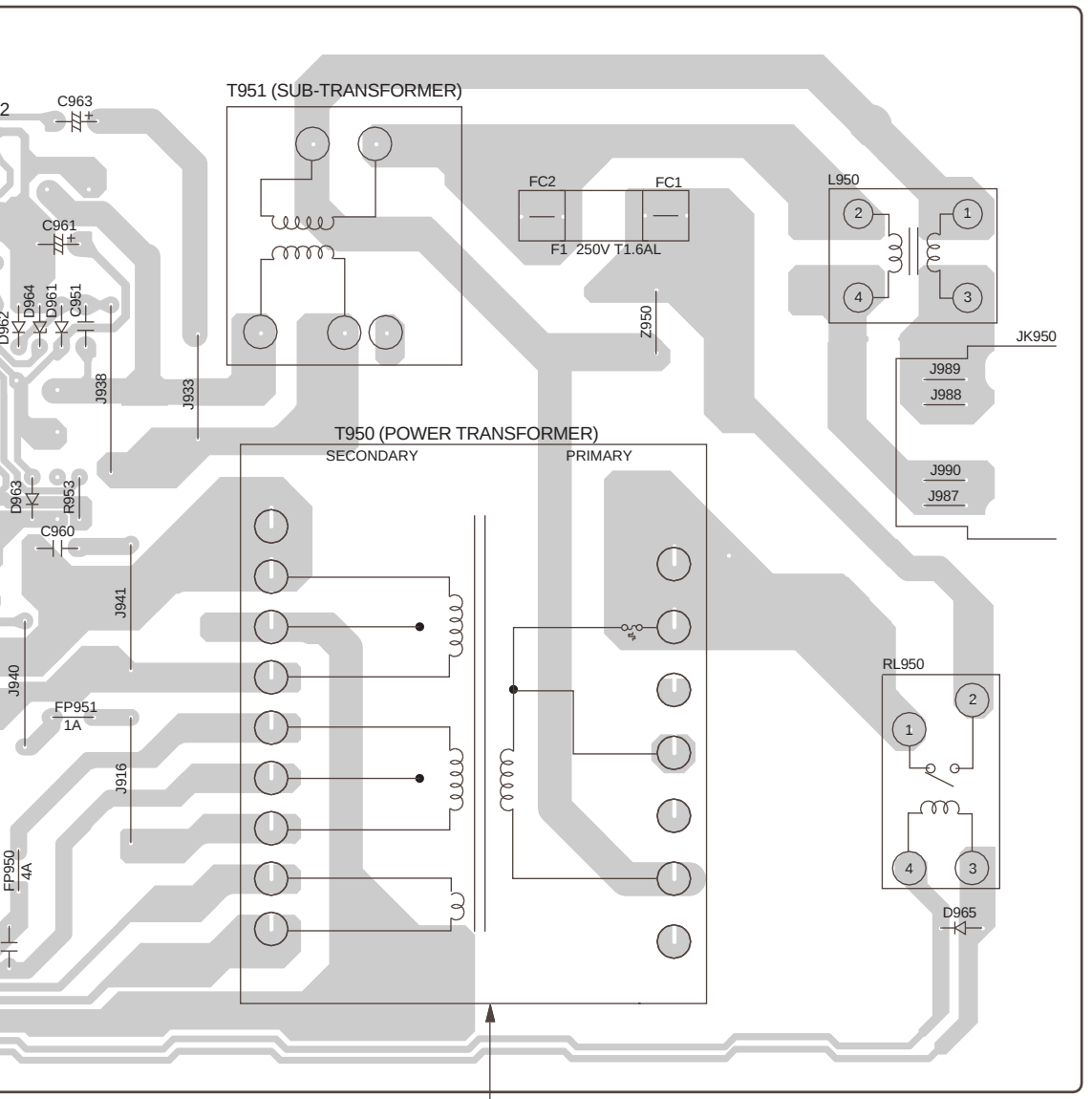


D TACT SWITCH P.C.B (REPX0356A)



E TRANSFORMER P.C.B (REPX0352B)

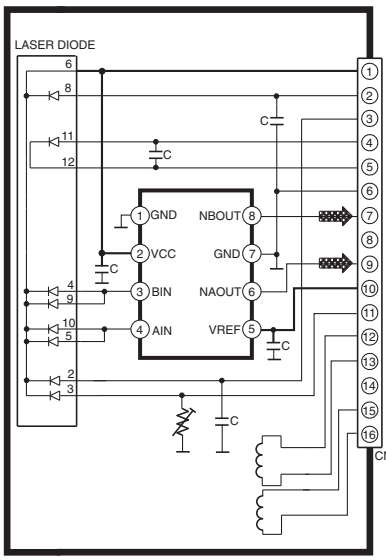



T951 (SUB-TRANSFORMER)
C963
C961
D962
D964
D961
C951
J938
J933
FC2
FC1
F1 250V T1.6AL
Z950
L950
JK950
J989
J988
J990
J987
AC IN
230V-240V
50HZ
T950 (POWER TRANSFORMER)
SECONDARY
PRIMARY
D963
R953
C960
J941
J940
FP951
1A
J916
FP950
4A
RL950
D965
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B

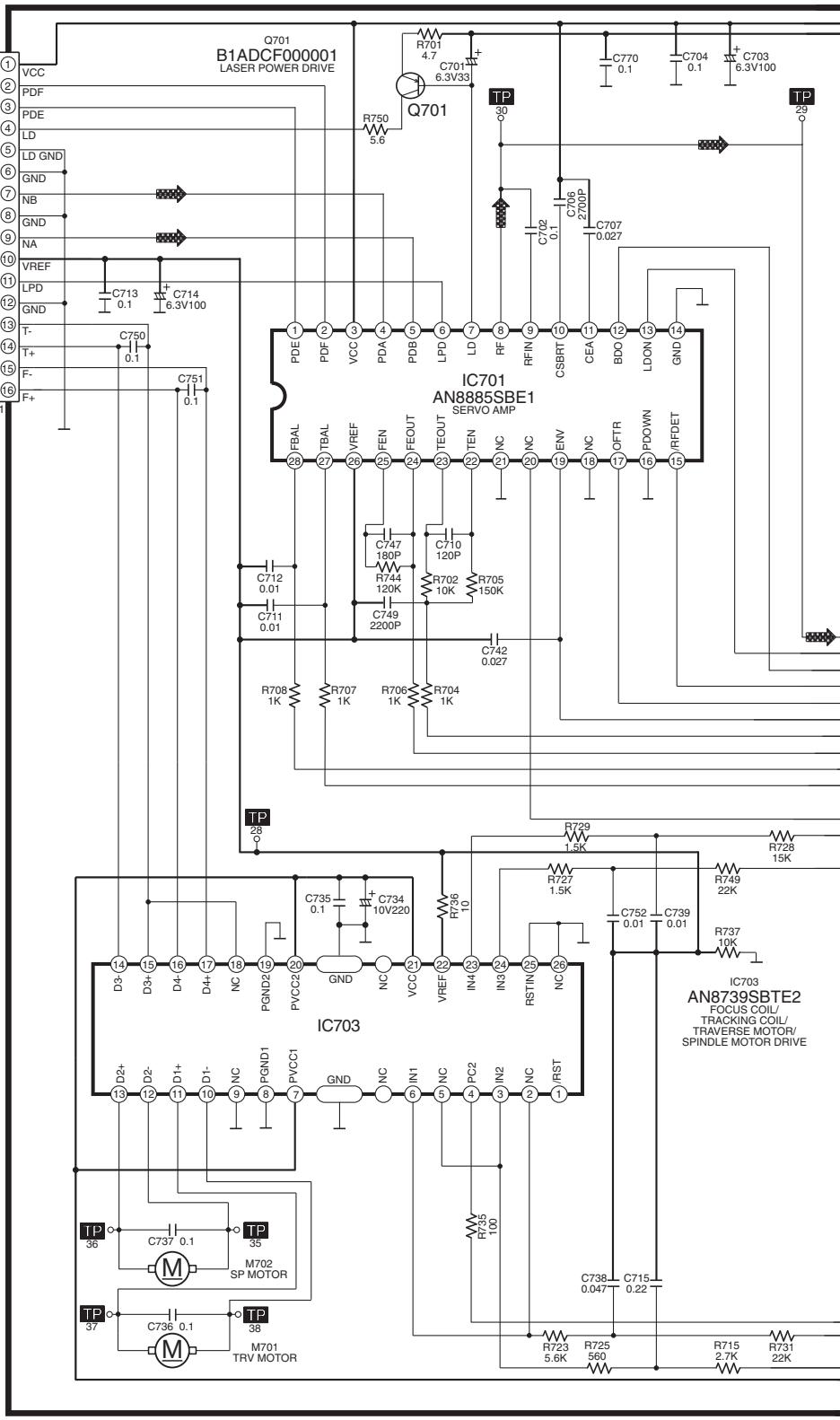
SCHEMATIC DIAGRAM -1

: +B SIGNAL LINE : CD-DA SIGNAL LINE

OPTICAL PICKUP CIRCUIT



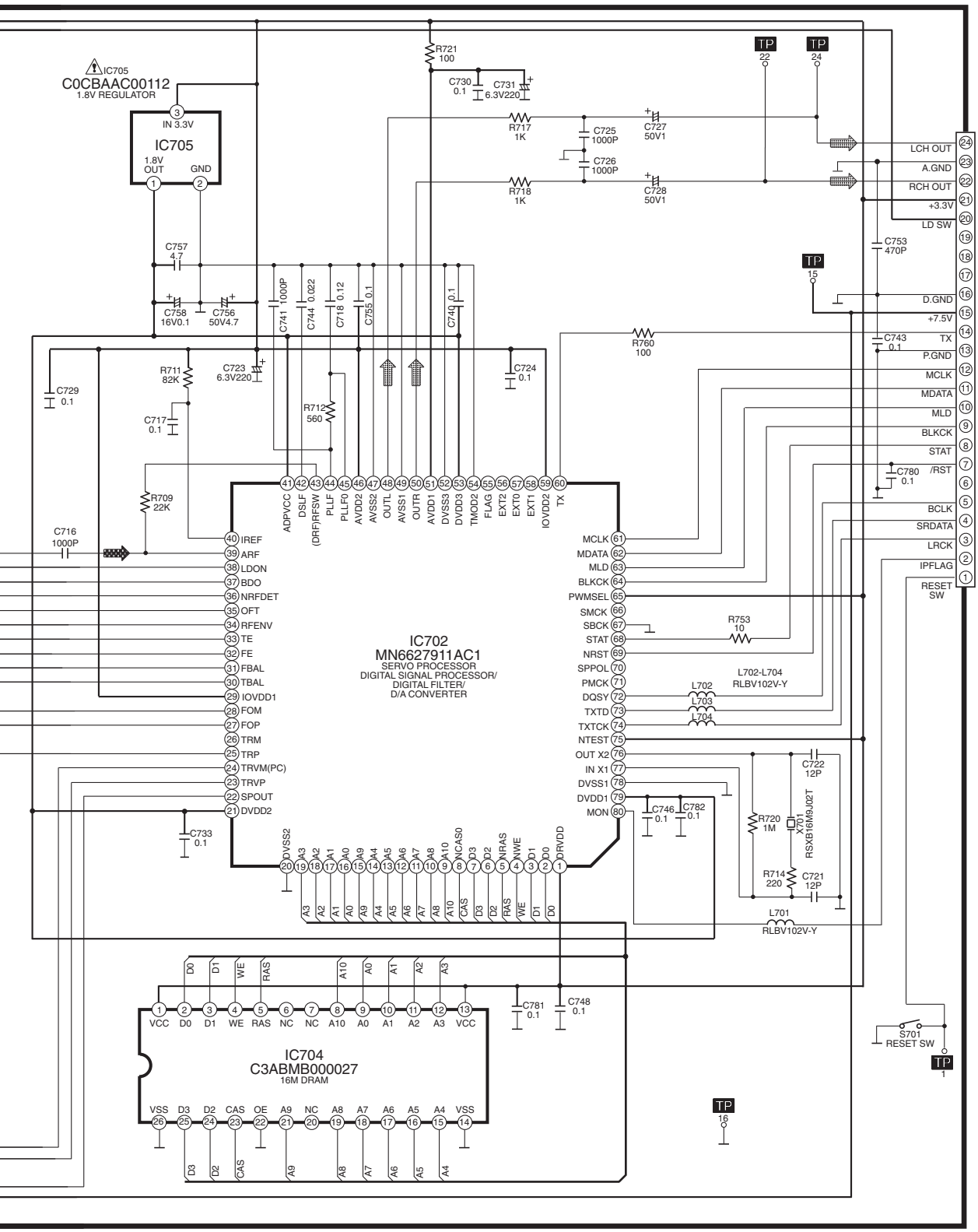
A CD SERVO CIRCUIT



SCHEMATIC DIAGRAM - 2

—— : +B SIGNAL LINE ▰▰▶ : CD-DA SIGNAL LINE ▱▱▶ : CD SIGNAL LINE

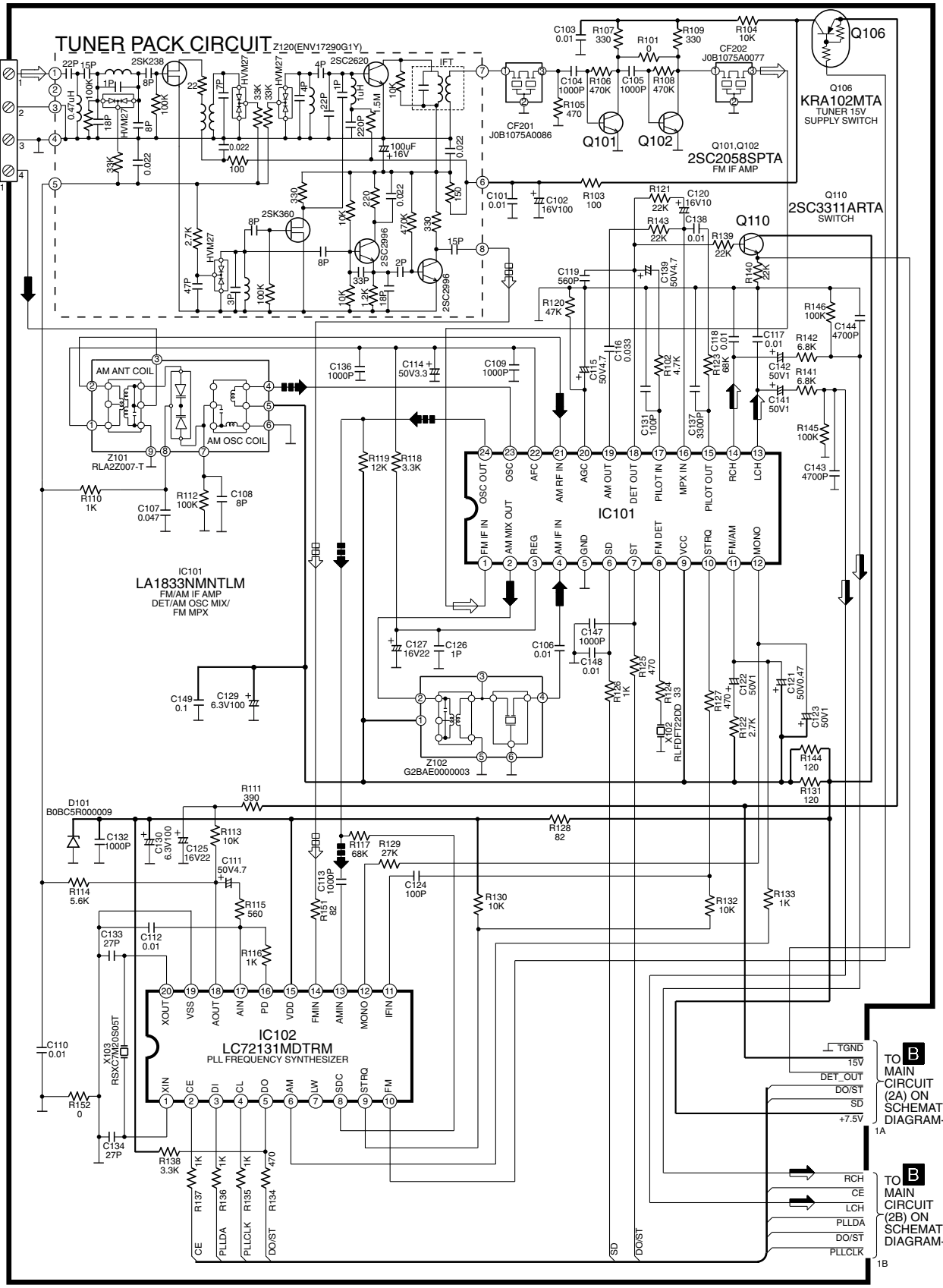
A CD SERVO CIRCUIT



SCHEMATIC DIAGRAM - 3

: +B SIGNAL LINE
: FM/AM SIGNAL LINE
: FM SIGNAL LINE
: FM OSC SIGNAL LINE
: AM SIGNAL LINE
: AM OSC SIGNAL LINE

B TUNER/MAIN CIRCUIT



SCHEMATIC DIAGRAM - 4

—— : +B SIGNAL LINE ⇨ : AUX SIGNAL LINE ⇨ : MAIN SIGNAL LINE

– – : -B SIGNAL LINE

B MAIN CIRCUIT

TO C PANEL CIRCUIT (CP601) ON SCHEMATIC DIAGRAM-10

CN303: 17 SW5V, 16 V_JOG_A, 15 V_JOG_B, 14 EX1_CLK, 13 EX1_DAT, 12 DECK2, 11 SSEQ_LED, 10 SW_LED, 9 KEY3, 8 KEY2, 7 KEY1, 6 5 4 3 PGND, 2 MOT10V, 1 DGND

TO J DECK CIRCUIT (CN1001) ON SCHEMATIC DIAGRAM-14

CN304: 1 CR02, 2 MOTOR, 3 BP1, 4 DECK1_H, 5 DMT, 6 P_GND, 7 MOT10V, 8 REC_H, 9 +15V, 10 REC_R, 11 REC_L, 12 AGND, 13 PBR, 14 PBL

MOT10V, /DMT, DECK1_H, /BP1, MTR

REC, +15V, REC_R, REC_L, C306 50V1, PBR, PBL

JK300: RCH, AUX, LCH

C410 0.22, C442 0.22, C443 0.1

R201 10K, L305 J0JBC0000019, C201 680P, C202 100P, R202 3.3K, C401 680P, C402 100P, R402 3.3K, R401 10K

AUXR, AUXL, +9.0V

JK301: INPUT, Vcc, GND

R460 470, C399 6.3V100, C400 0.01

TX, CD3.3V, VREF+, -9.0V

R340 10K, R396 47K, R395 47K, R343 10K

LO_L, LO_R, HI_L, HI_R

R443 2.7K, R243 2.7K, R444 1.8K, R244 1.8K

TO H CD LOADING CIRCUIT (CN1) ON SCHEMATIC DIAGRAM-11

CN309: 14 CHG_CW, 13 CHG_HALF, 12 8V, 11 CHG_CCW, 10 CLAMP, 9 OPEN, 8 CD_SW1, 7 PGND, 6 CD_SW2, 5 DGND, 4 5V, 3 POSITION, 2 BOTTOMSW, 1 PLUNGER

CHG_CW, CHG_HLF, CD8V, CHG_CCW, CHG_AD1, CHG_AD2, CHG_SW1, CHG_SW2, SW5V, CHG_PLR, MOT10V

R344 22K, R345 12K, C326 0.47, R348 220, R346 22K, R347 12K

R823 0, Q323, R349 1K, R350 10K, D324 B0ACCK000005, Q324

Q404, R437 18K, R436 18K, R439 4.7K, C430 0.015, R438 220K, C431 180P, C435 50V0.68

Q204, Q404 KTC3875GRTA LPF FREQ AMP SWITCH

Q204, R237 18K, R236 18K, R239 4.7K, C230 0.015, R238 220K, C231 820P, C235 50V0.68

Q405, C433 8200P, C432 8200P, R442 5.6K, R440 4.7K, C434 50V1, R441 12K

Q205, Q405 KTC3875GRTA HPF FREQ AMP SWITCH

Q205, C233 8200P, C232 8200P, R242 5.6K, R240 4.7K, C234 50V1, R241 12K

Q308 KTA12710YTA CURRENT CONTROL SWITCH

Q324 KTA12710YTA CD MOTOR SUPPLY SWITCH

Q323 KRC102STA PLUNGER MOTOR SUPPLY CONTROL SWITCH

R324 12, R323 15, D309 RL1N4003S-P, CD8V

Q309 KTC3199GRTA VOLTAGE STABILISER CD3.3V

C321 0.01, R325 10K, R327 2.2K, D307, D308, D307-D308 B0ACCK000005

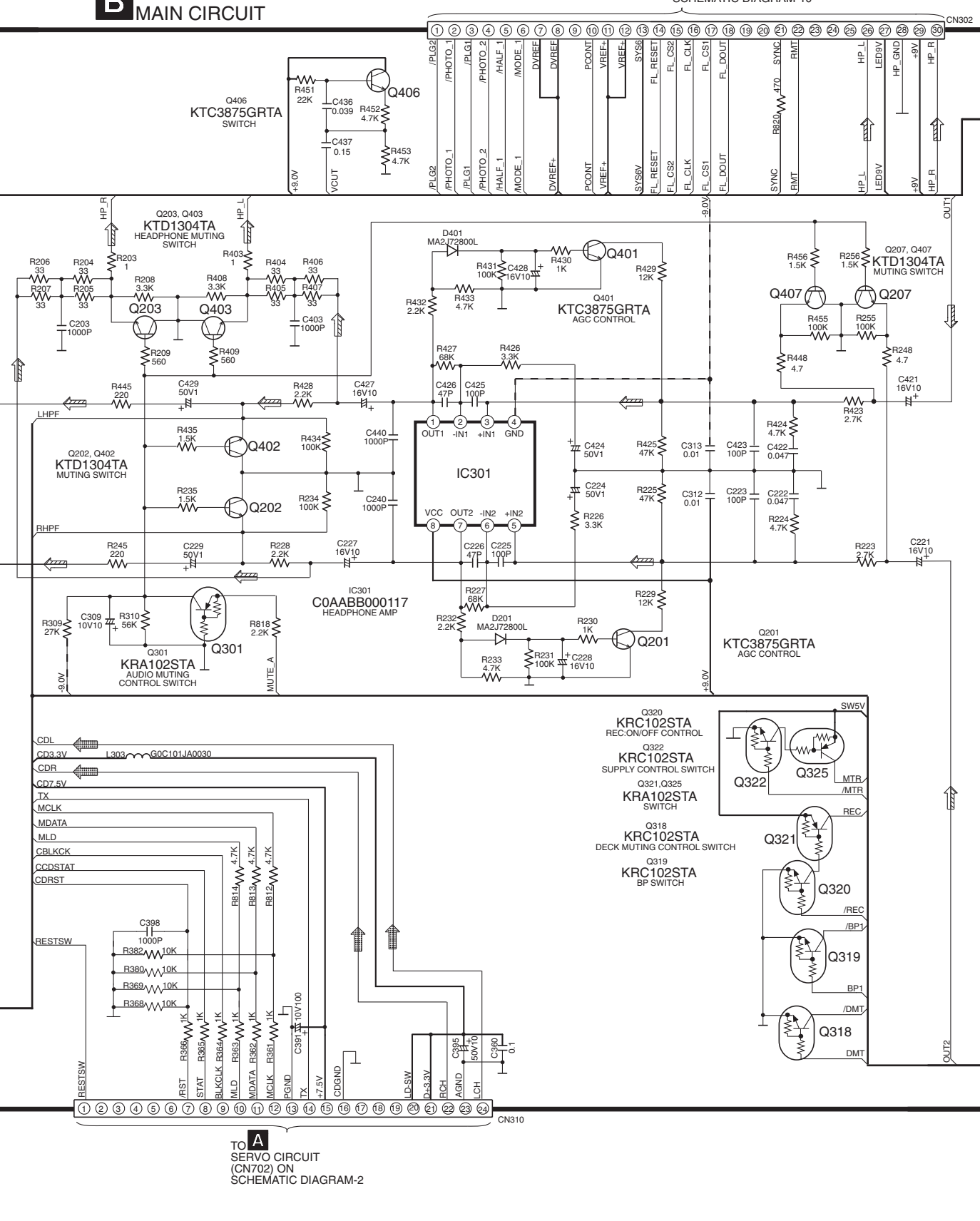
R326 100, Q310 KRA110MTA CD ON/OFF SUPPLY SWITCH, /CD, SW5V, CD3.3V

R329 330, C320 10V33, R328 3.9K

SCHEMATIC DIAGRAM - 5

—— : +B SIGNAL LINE
– – : -B SIGNAL LINE
: CD SIGNAL LINE
: MAIN SIGNAL LINE

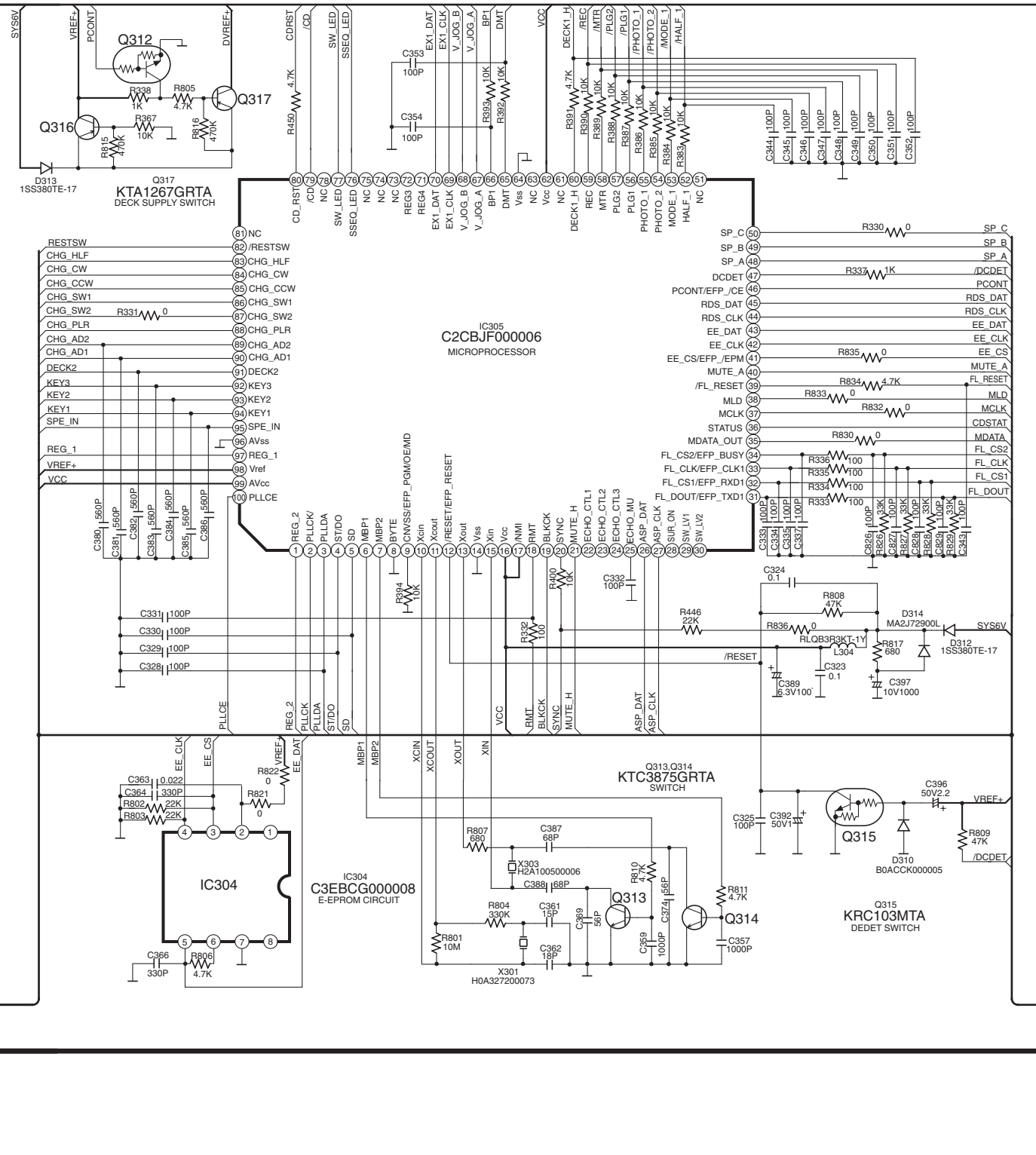
B MAIN CIRCUIT



SCHEMATIC DIAGRAM - 6

—— : +B SIGNAL LINE

B MAIN CIRCUIT

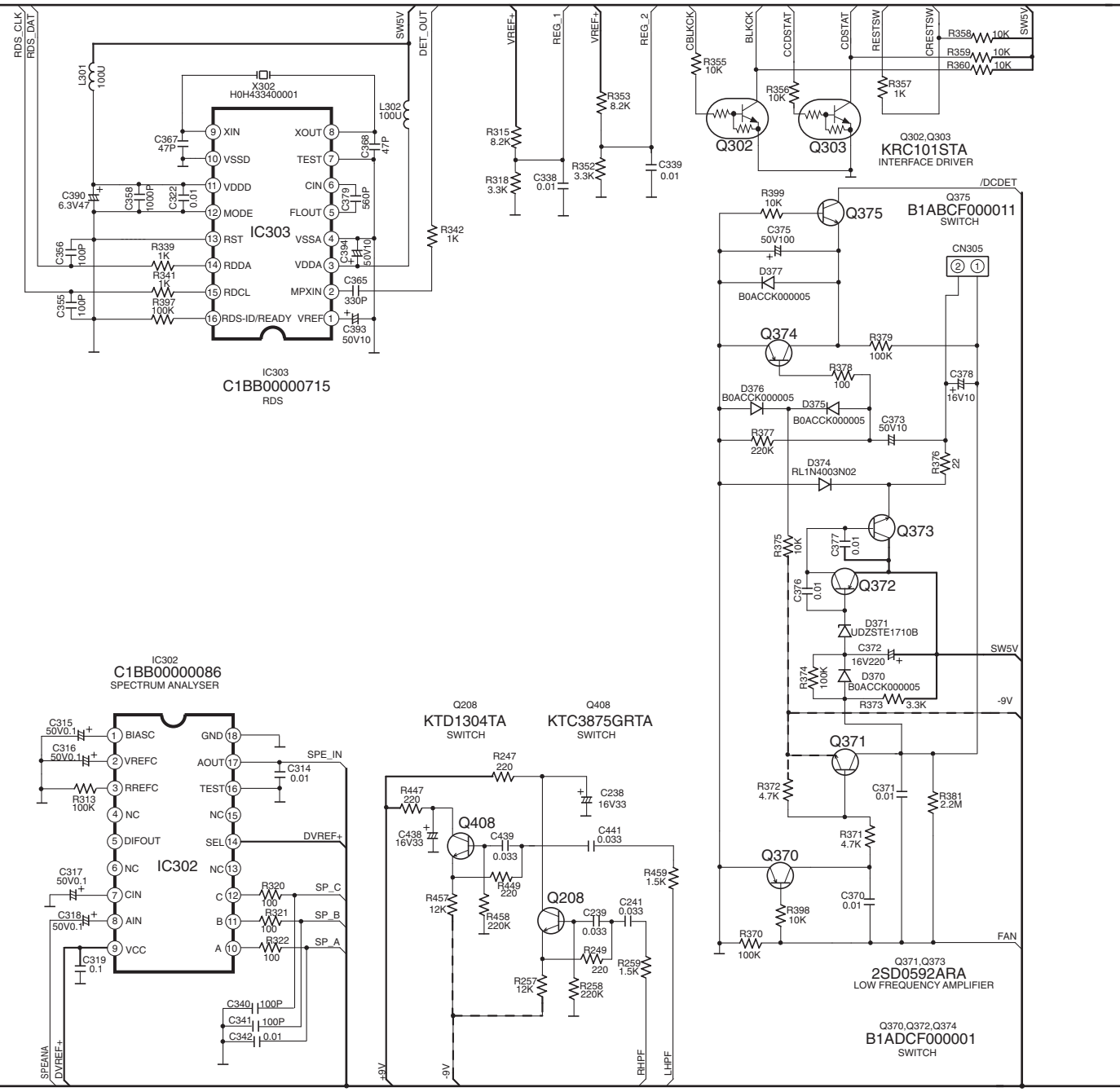


SCHEMATIC DIAGRAM - 7

—— : +B SIGNAL LINE

– – : -B SIGNAL LINE

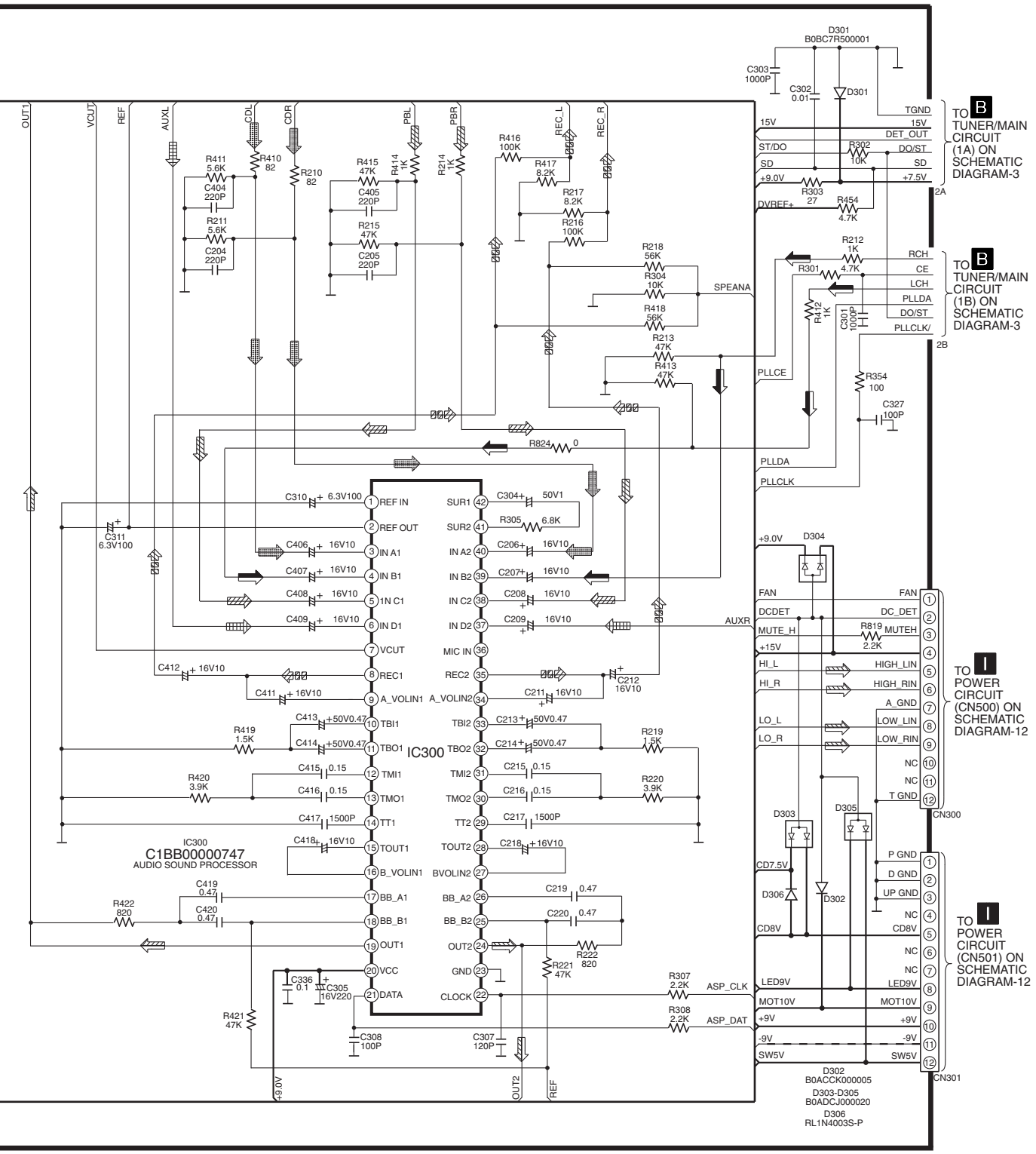
B MAIN CIRCUIT



SCHEMATIC DIAGRAM - 8

: +B SIGNAL LINE
: -B SIGNAL LINE
: AUX SIGNAL LINE
: CD SIGNAL LINE
: FM/AM SIGNAL LINE
: MAIN SIGNAL LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE

B MAIN CIRCUIT

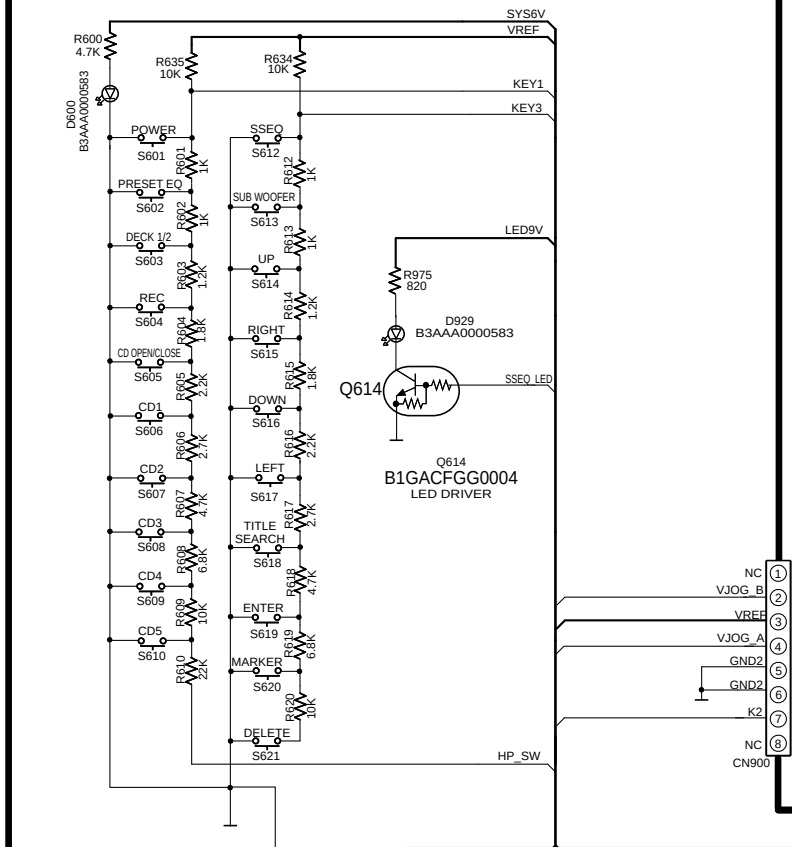


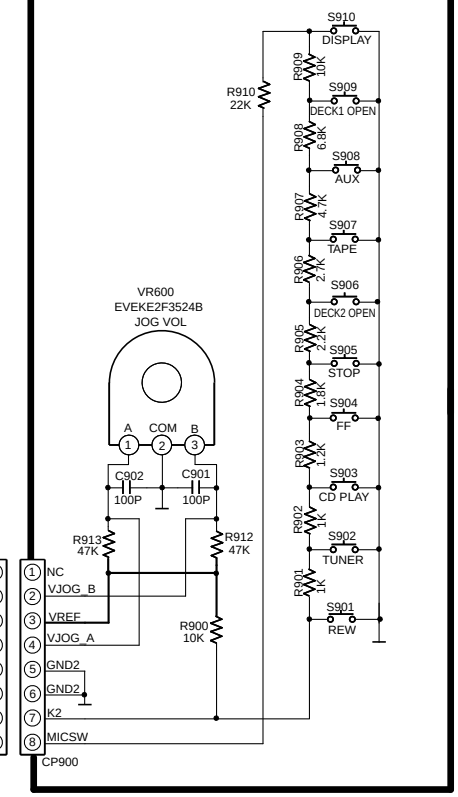
SCHEMATIC DIAGRAM - 9

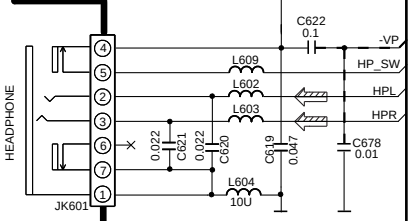
: +B SIGNAL LINE
: +B SIGNAL LINE
: MAIN SIGNAL LINE

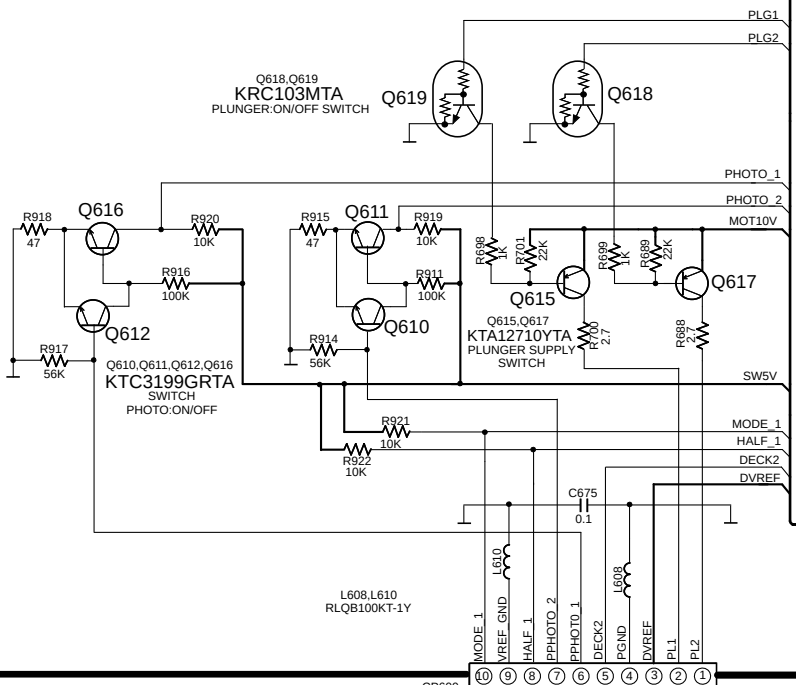
C PANEL CIRCUIT

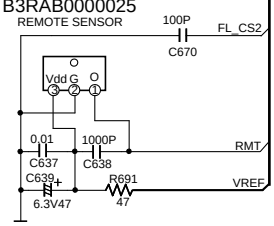
D TACT SWITCH CIRCUIT









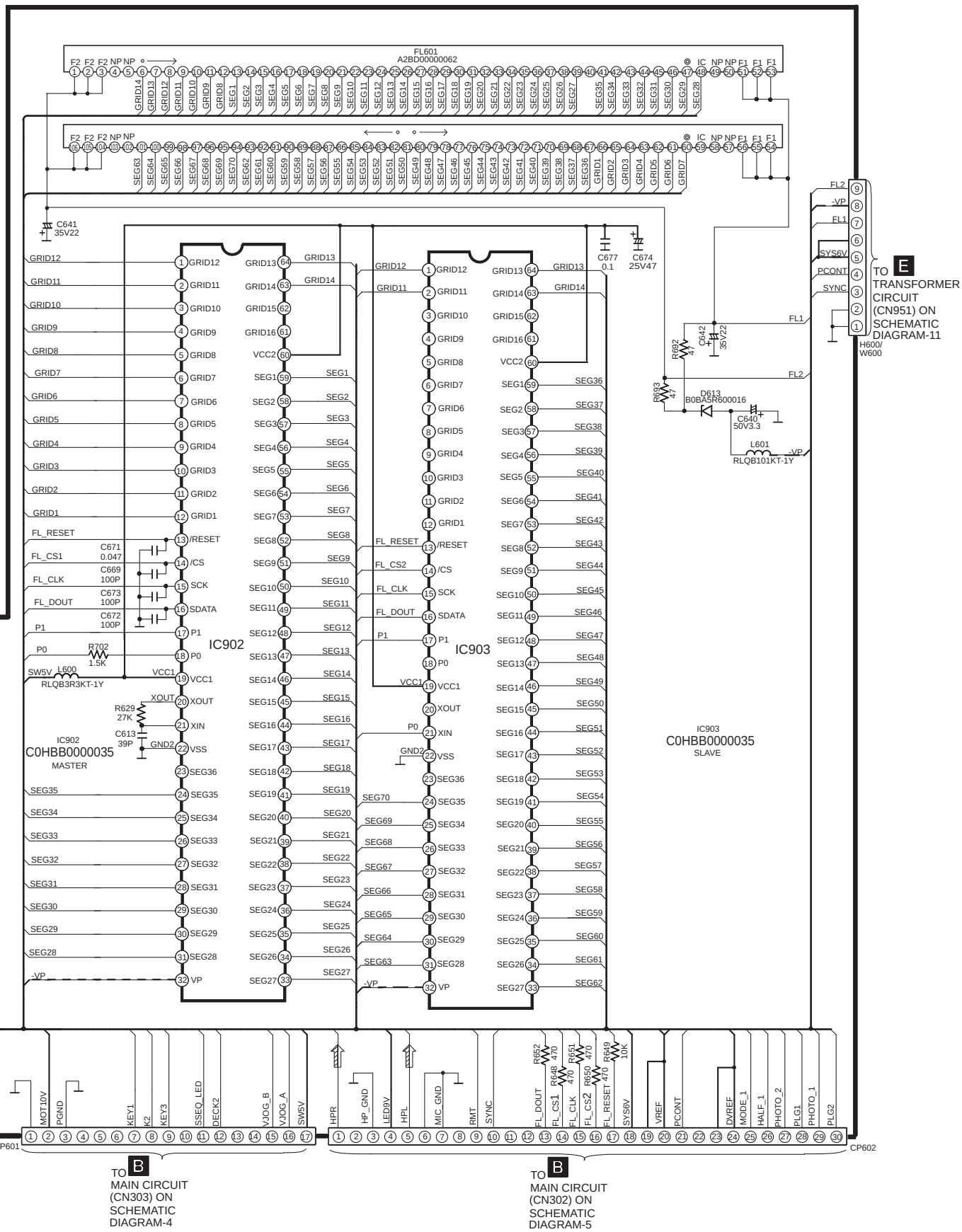


TO K
MECHANISM CIRCUIT
(CN971) ON
SCHEMATIC DIAGRAM-14

SCHEMATIC DIAGRAM - 10

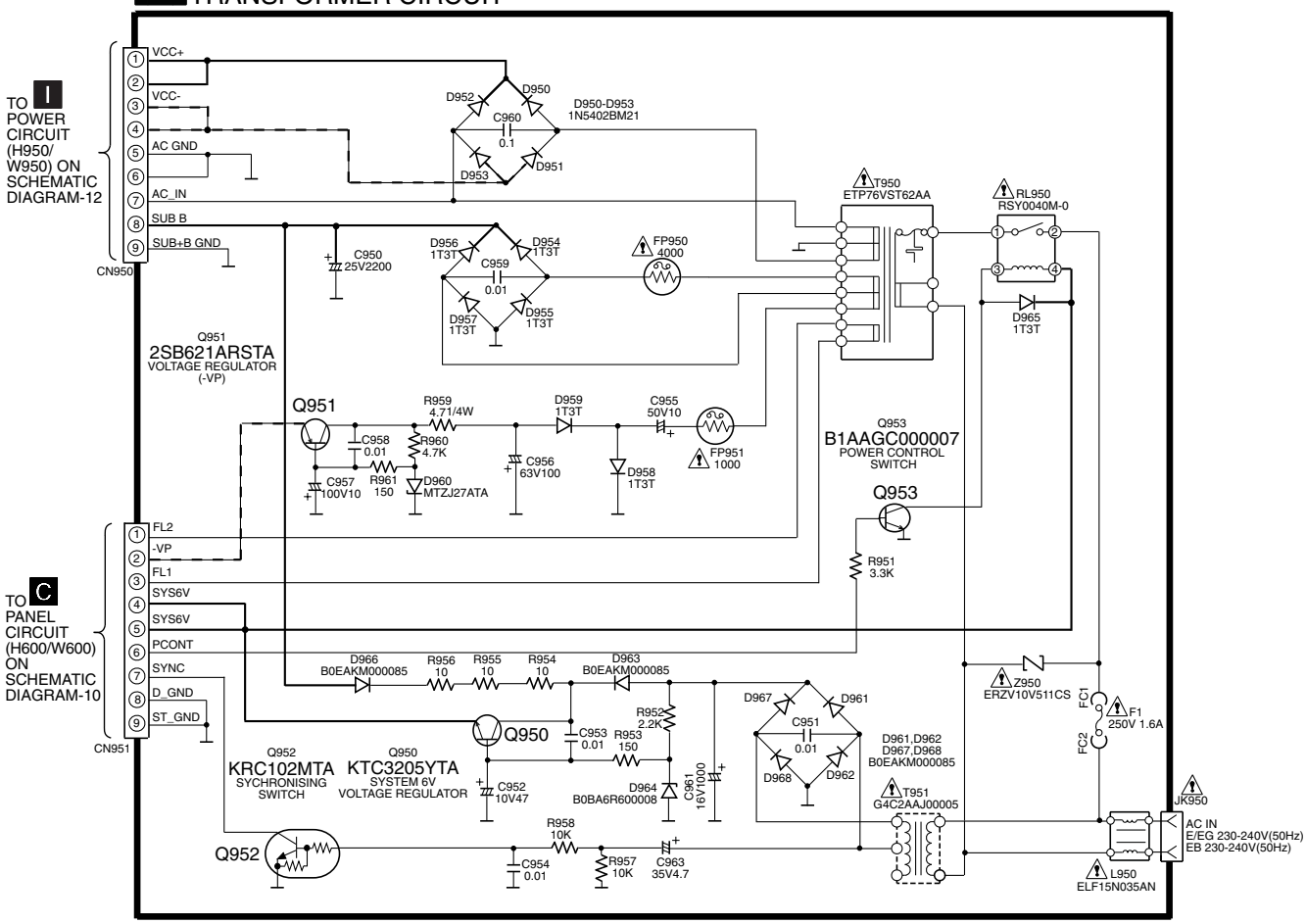
C PANEL CIRCUIT

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

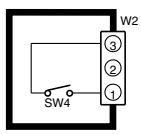


—— : +B SIGNAL LINE – – : -B SIGNAL LINE

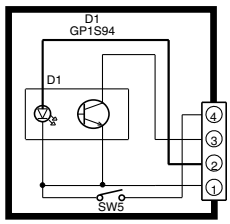
E TRANSFORMER CIRCUIT



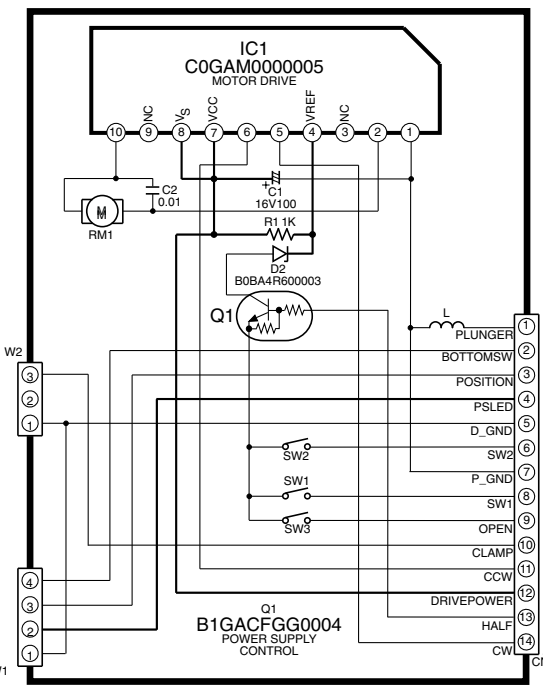
F CD DETECT CIRCUIT



G SPINDLE POSITION CIRCUIT



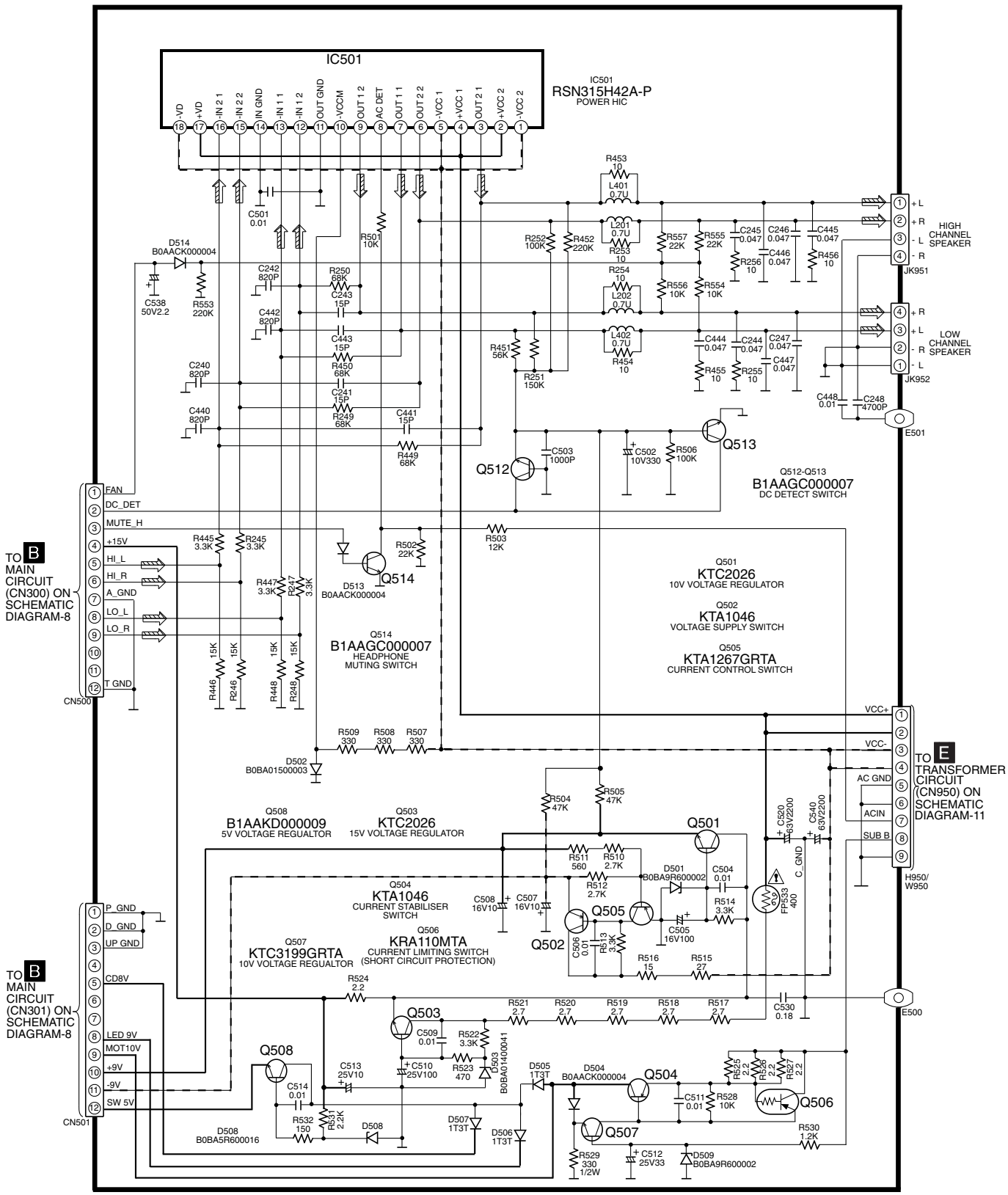
H CD LOADING CIRCUIT



SCHEMATIC DIAGRAM - 12

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

I POWER CIRCUIT



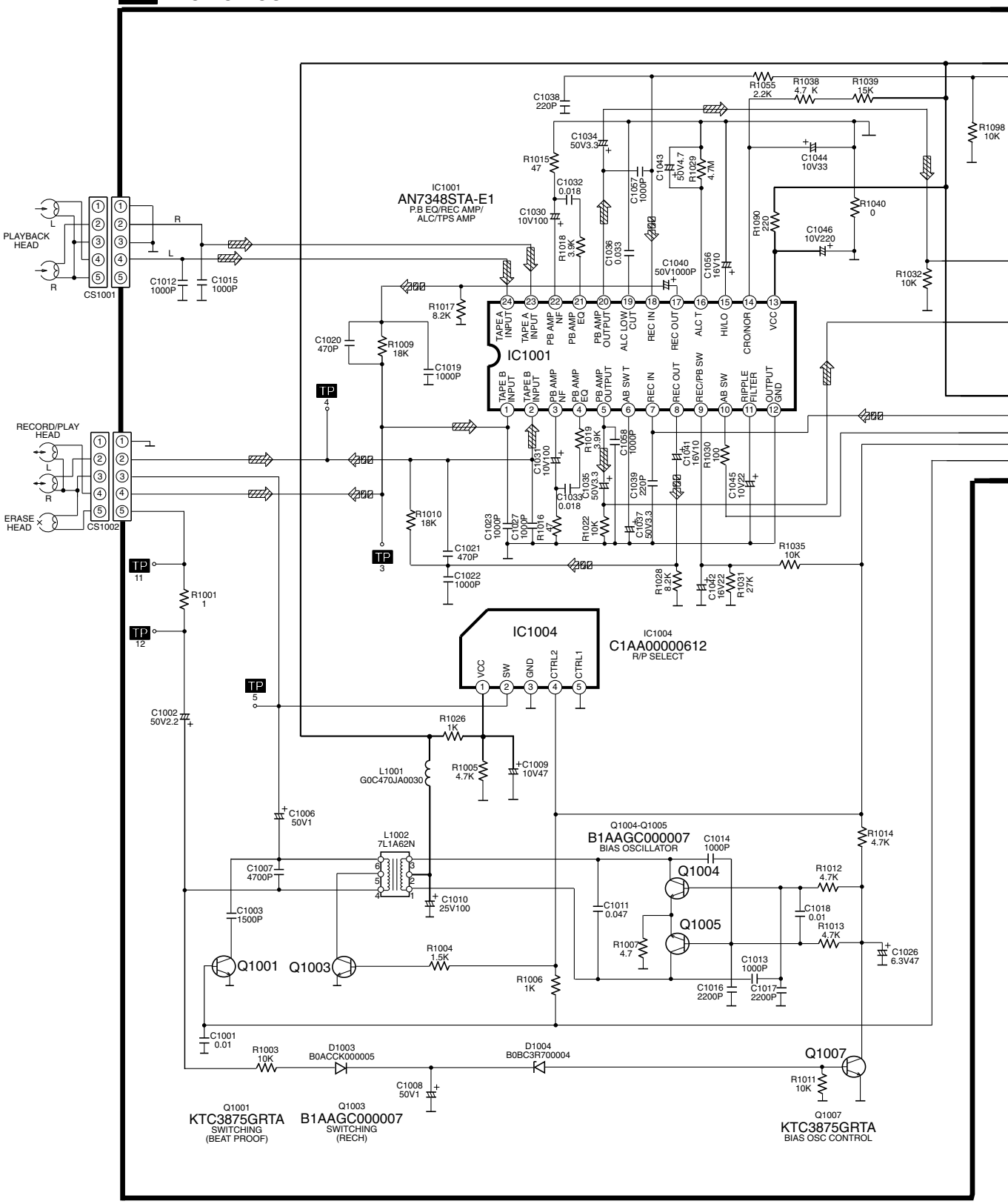
SCHEMATIC DIAGRAM -13

—— : +B SIGNAL LINE

▨▨▨ : PLAYBACK SIGNAL LINE

▨▨▨ : RECORD SIGNAL LINE

J DECK CIRCUIT



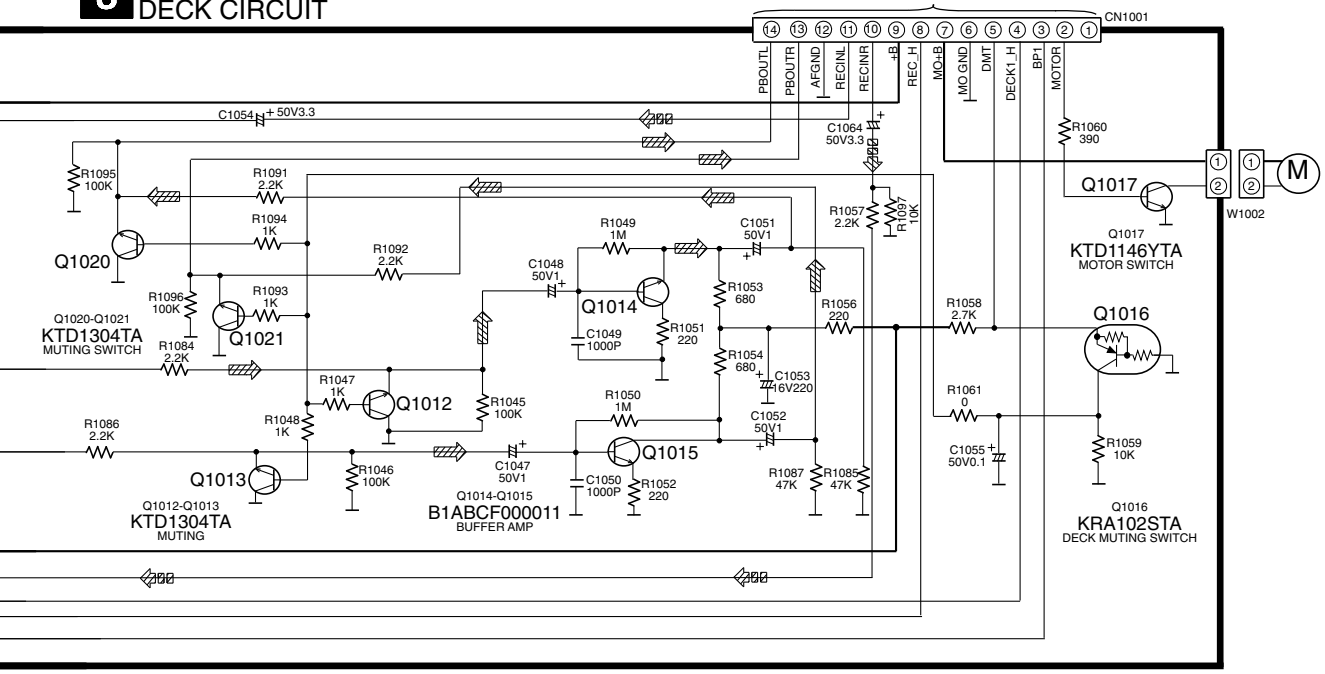
SCHEMATIC DIAGRAM - 14

: +B SIGNAL LINE : PLAYBACK SIGNAL LINE

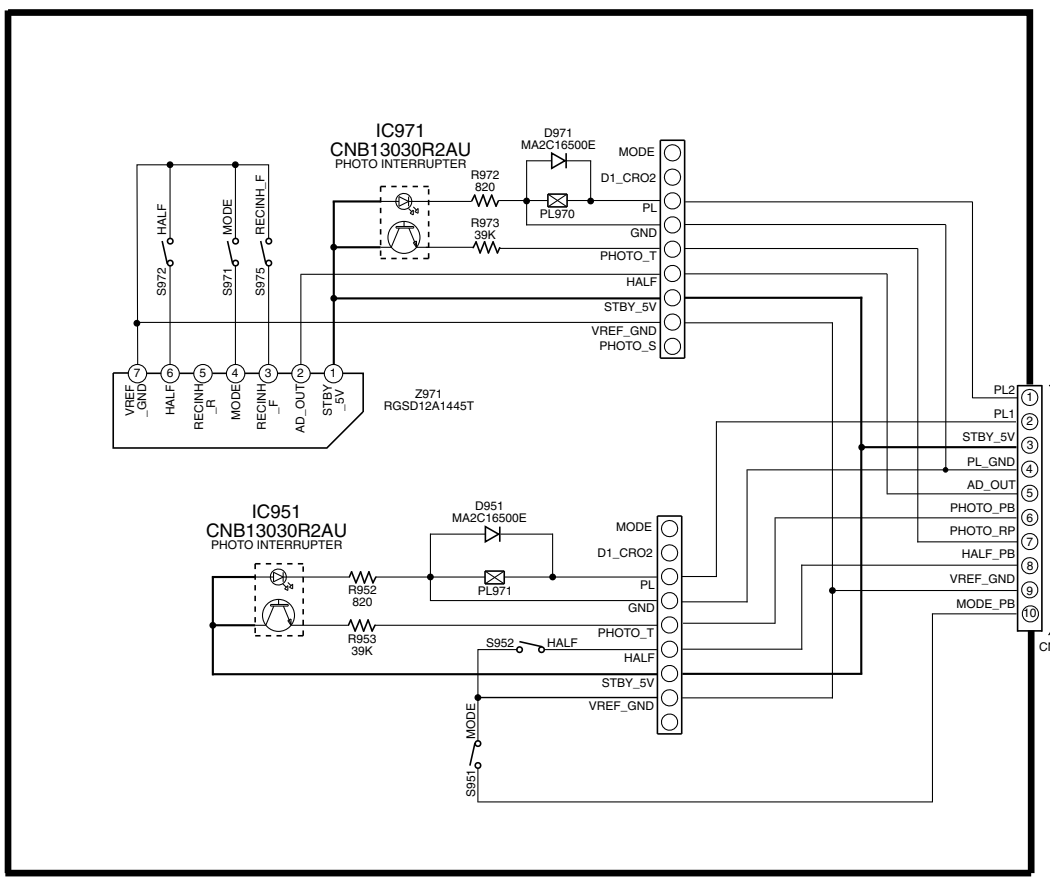
: RECORD SIGNAL LINE

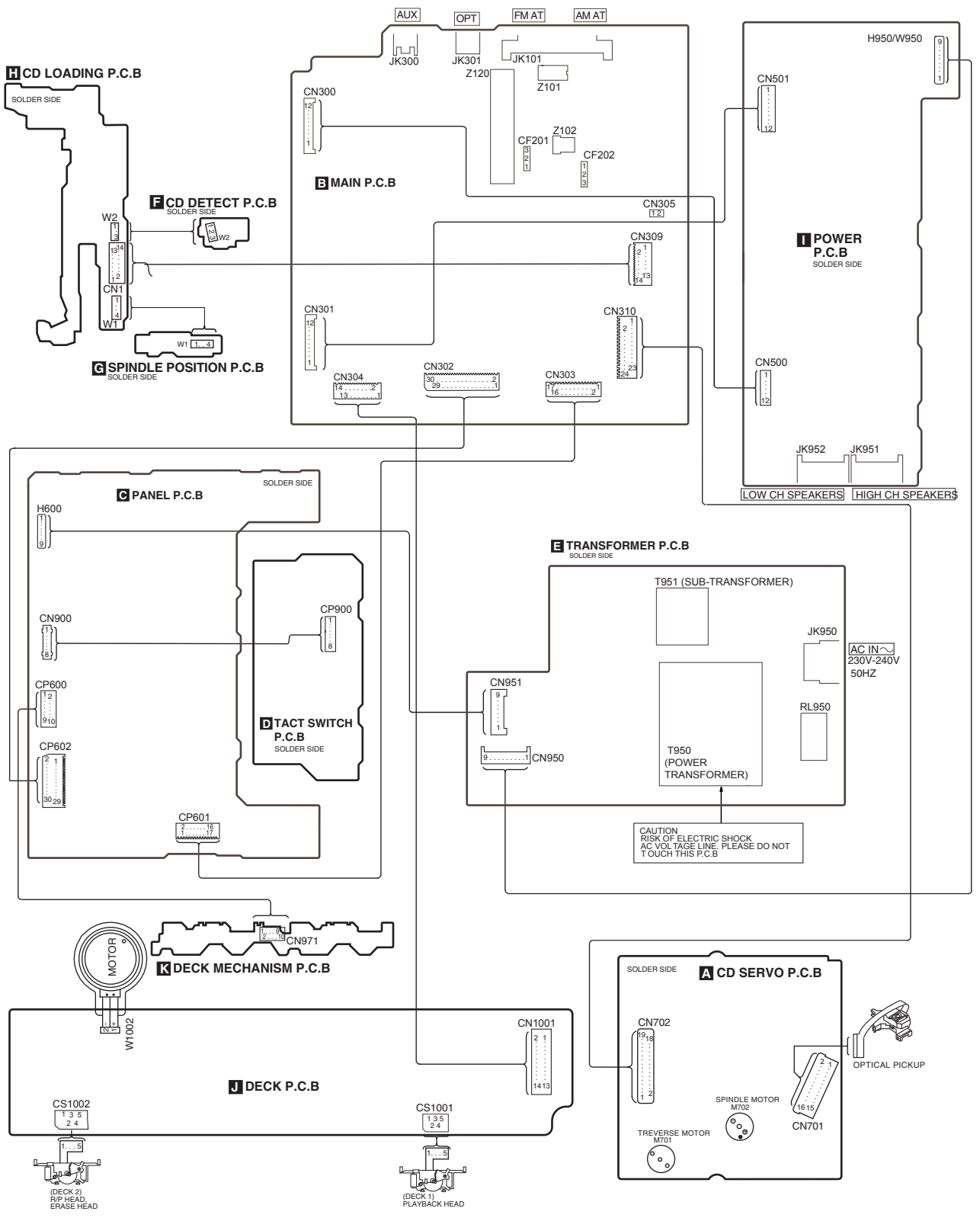
TO B
MAIN CIRCUIT (CN304) ON
SCHEMATIC DIAGRAM-4

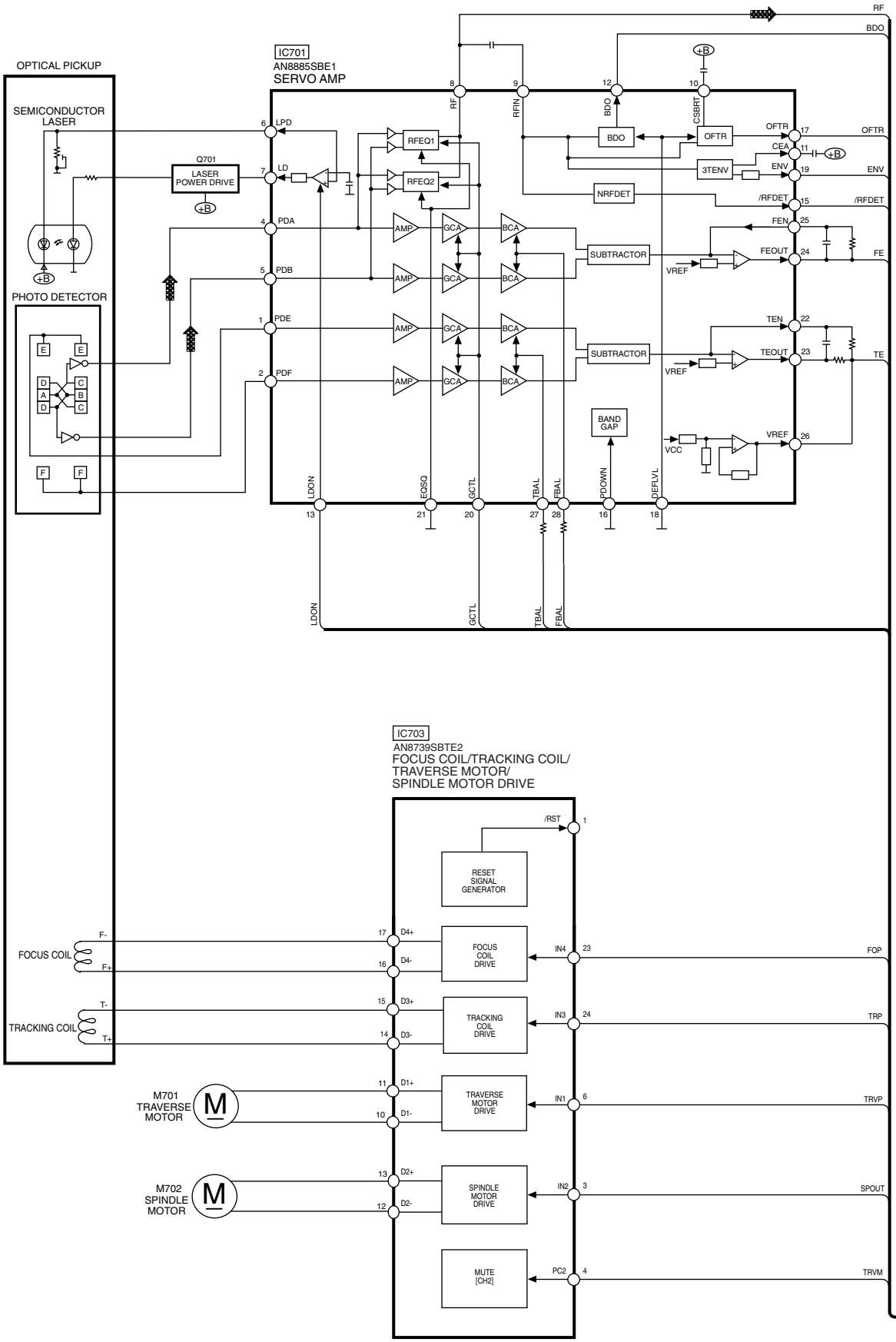
J DECK CIRCUIT

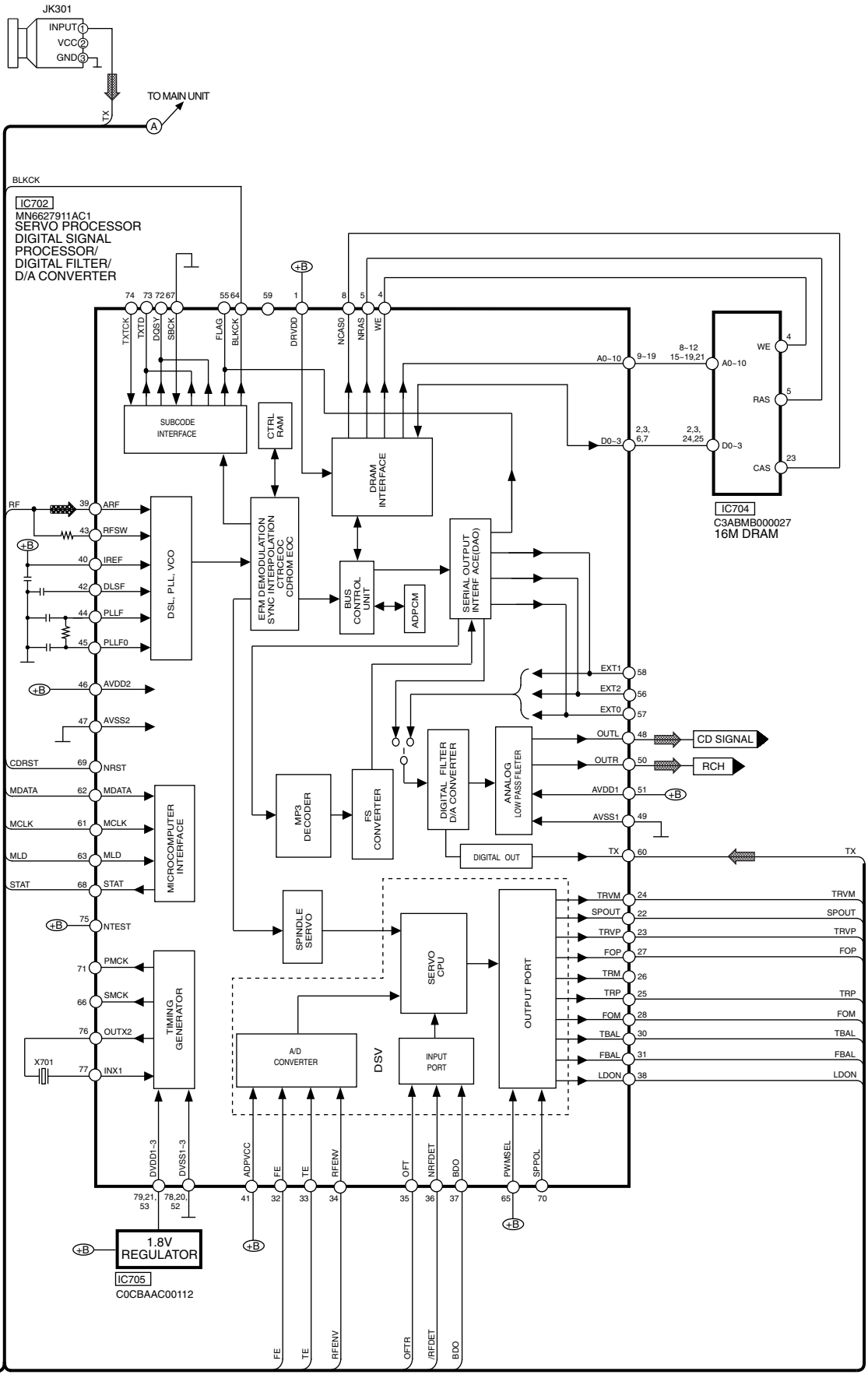


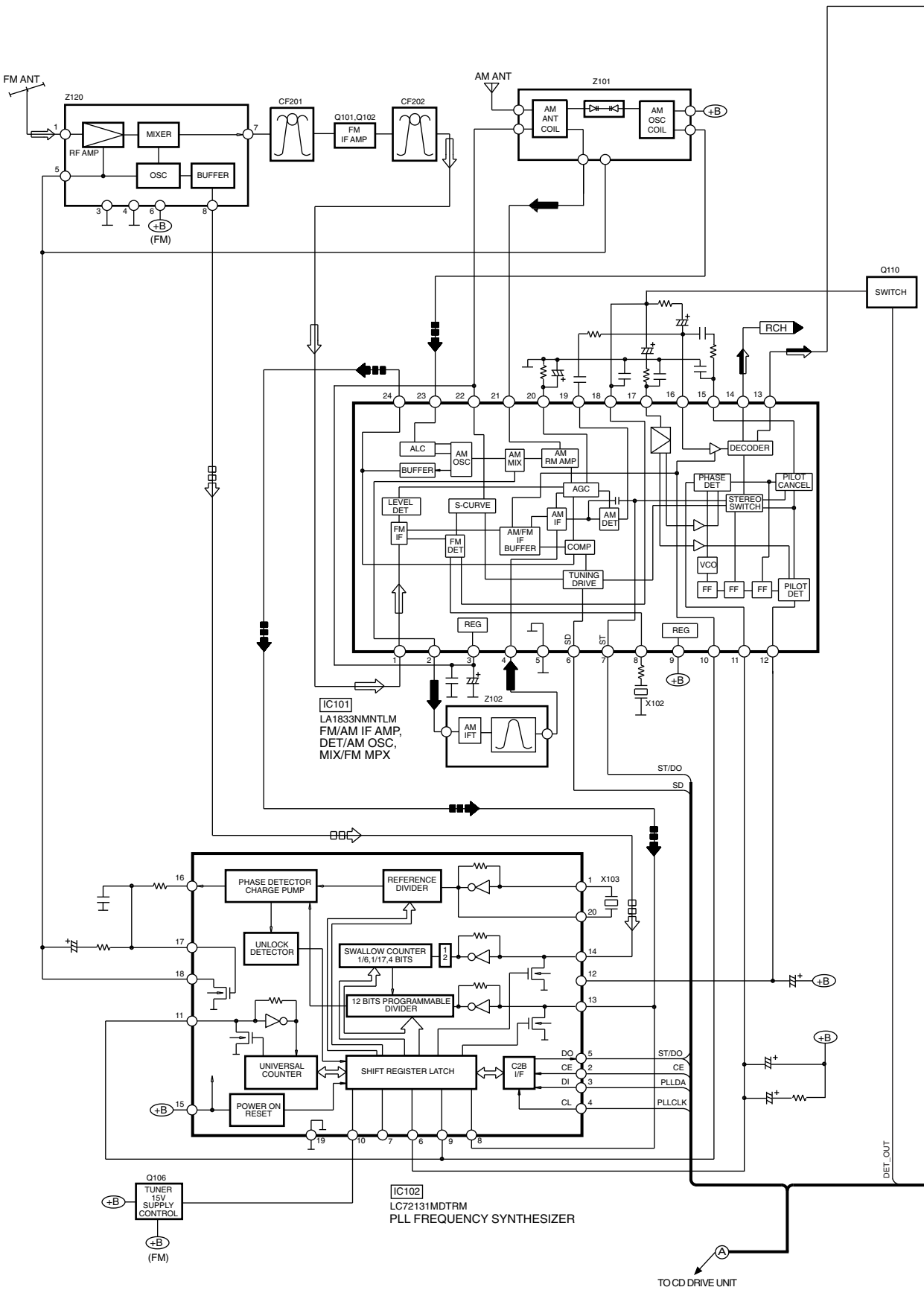
K MECHANISM CIRCUIT

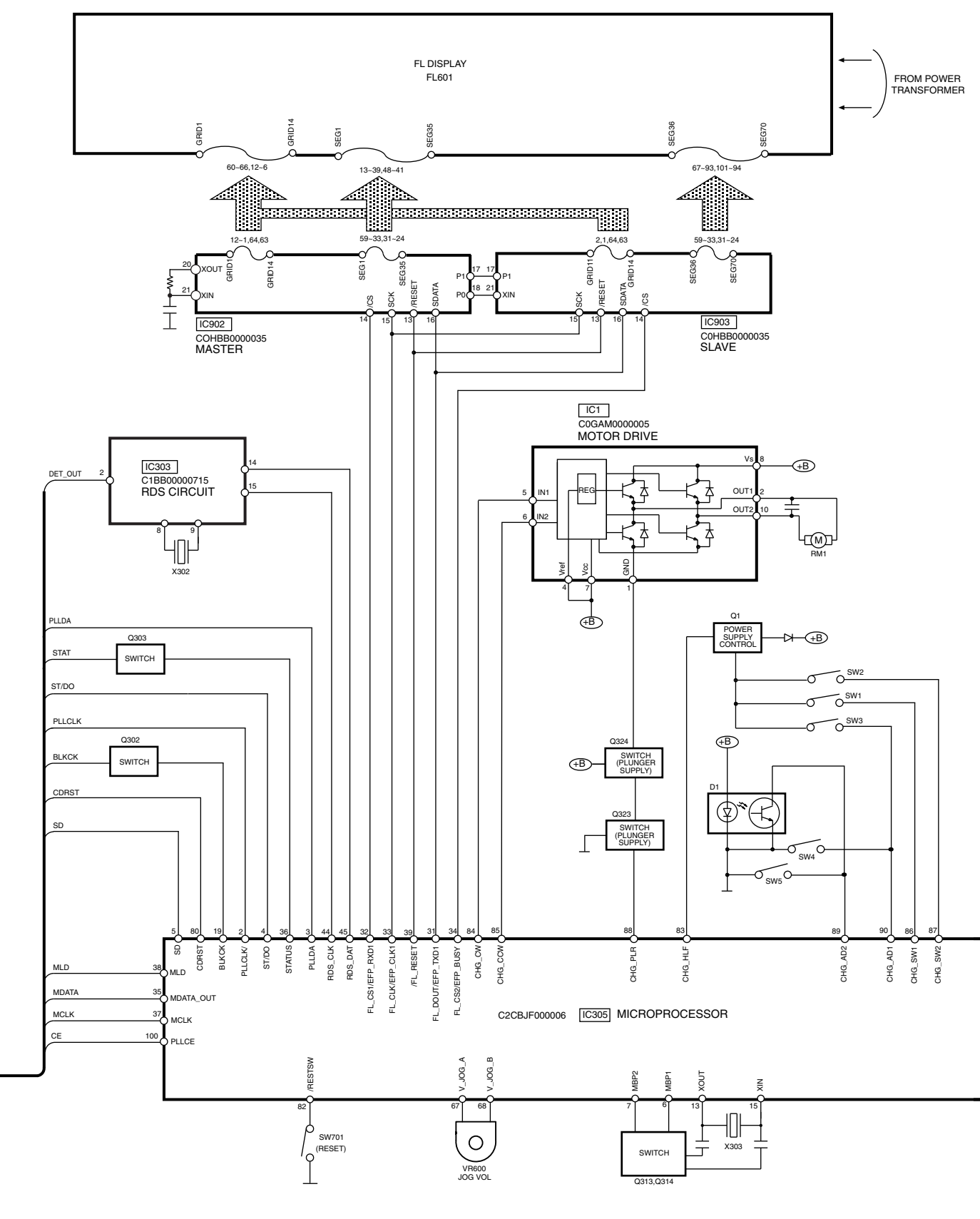


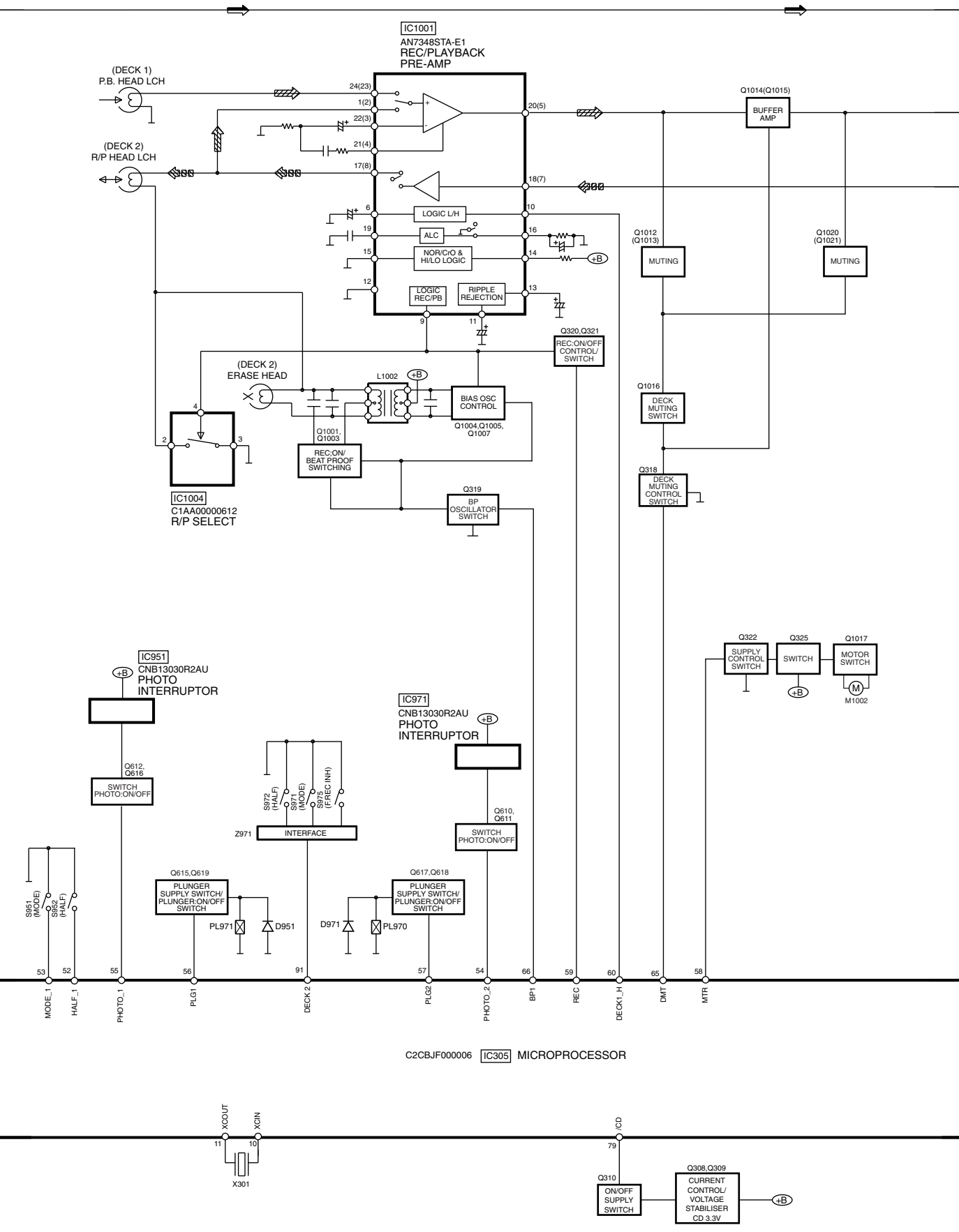

AUX
OPT
FM AT
AM AT
JK300
JK301
JK101
Z120
Z101
Z102
CF201
CF202
H CD LOADING P.C.B
SOLDER SIDE
CN300
B MAIN P.C.B
F CD DETECT P.C.B
SOLDER SIDE
W2
CN1
W1
G SPINDLE POSITION P.C.B
SOLDER SIDE
CN305
CN309
CN301
CN310
CN304
CN302
CN303
H950/W950
CN501
I POWER P.C.B
SOLDER SIDE
CN500
JK952
JK951
LOW CH SPEAKERS
HIGH CH SPEAKERS
C PANEL P.C.B
SOLDER SIDE
H600
CN900
CP900
CP600
CP602
CP601
D TACT SWITCH P.C.B
SOLDER SIDE
E TRANSFORMER P.C.B
SOLDER SIDE
T951 (SUB-TRANSFORMER)
JK950
AC IN~
230V-240V
50HZ
CN951
RL950
CN950
T950
(POWER
TRANSFORMER)
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B
CN971
MOTOR
K DECK MECHANISM P.C.B
W1002
CN1001
J DECK P.C.B
CS1002
CS1001
(DECK 2)
R/P HEAD.
ERASE HEAD
(DECK 1)
PLAYBACK HEAD
SOLDER SIDE
A CD SERVO P.C.B
CN702
OPTICAL PICKUP
SPINDLE MOTOR
M702
TREVERSE MOTOR
M701
CN701


OPTICAL PICKUP
SEMICONDUCTOR LASER
PHOTO DETECTOR
IC701
AN8885SBE1
SERVO AMP
Q701
LASER POWER DRIVE
LPD
LD
PDA
PDB
PDE
PDF
RFEQ1
RFEQ2
AMP
GCA
BCA
SUBTRACTOR
VREF
BDO
OFTR
3TENV
NRFDET
CSBRT
CEA
ENV
/RFDET
FEN
FEOUT
FE
TEN
TEOUT
TE
VCC
BAND GAP
RF
RFIN
LDON
EQSQ
GCTL
TBAL
FBAL
PDOWN
DEFLVL
IC703
AN8739SBTE2
FOCUS COIL/TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVE
/RST
RESET SIGNAL GENERATOR
FOCUS COIL
TRACKING COIL
FOCUS COIL DRIVE
TRACKING COIL DRIVE
TRAVERSE MOTOR DRIVE
SPINDLE MOTOR DRIVE
MUTE [CH2]
M701 TRAVERSE MOTOR
M702 SPINDLE MOTOR
IN4
IN3
IN1
IN2
PC2
FOP
TRP
TRVP
SPOUT
TRVM

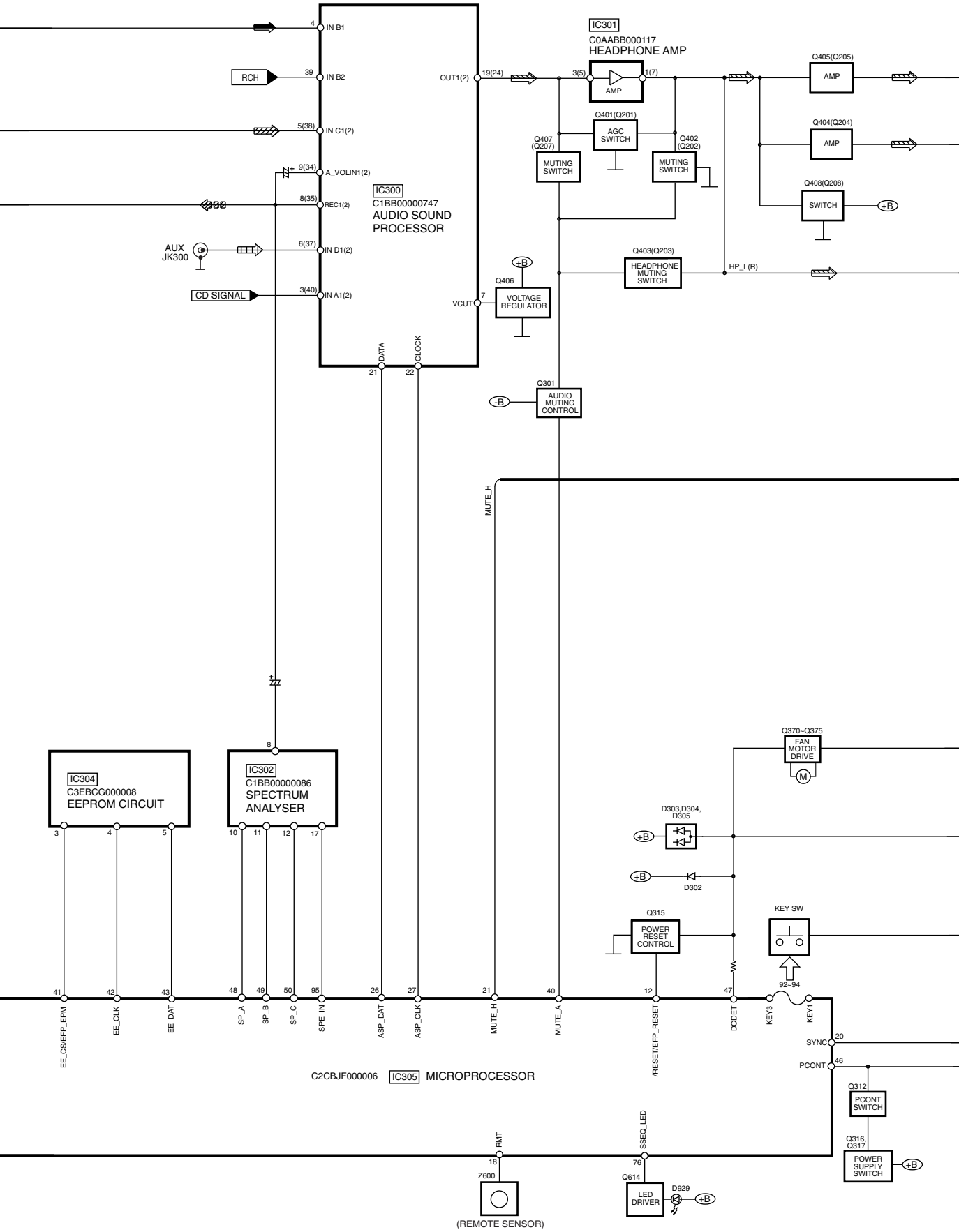

JK301
INPUT
VCC
GND
TO MAIN UNIT
TX
A
BLKCK
IC702
MN6627911AC1
SERVO PROCESSOR
DIGITAL SIGNAL
PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
+B
TXTCK
TXTD
DQSY
SBCK
FLAG
BLKCK
DRVDD
NCAS0
NRAS
WE
SUBCODE
INTERFACE
CTRL
RAM
DRAM
INTERFACE
A0~10
D0~3
IC704
C3ABMB000027
16M DRAM
RF
ARF
RFSW
IREF
DLSF
PLLF
PLLF0
DSL, PLL, VCO
EFM DEMODULATION
SYNC INTERPOLATION
CTRCEOC
CDROM EOC
BUS
CONTROL
UNIT
ADPCM
SERIAL OUTPUT
INTERF ACE(DAO)
AVDD2
AVSS2
EXT1
EXT2
EXT0
OUTL
OUTR
AVDD1
AVSS1
CD SIGNAL
RCH
CDRST
NRST
MDATA
MCLK
MLD
STAT
MICROCOMPUTER
INTERFACE
MP3
DECODER
FS
CONVERTER
DIGITAL FILTER
D/A CONVERTER
ANALOG
LOW PASS FILETER
DIGITAL OUT
TX
NTEST
SPINDLE
SERVO
SERVO
CPU
OUTPUT PORT
TRVM
SPOUT
TRVP
FOP
TRM
TRP
FOM
TBAL
FBAL
LDON
PMCK
SMCK
OUTX2
INX1
X701
TIMING
GENERATOR
A/D
CONVERTER
DSV
INPUT
PORT
DVDD1~3
DVSS1~3
ADPVCC
FE
TE
RFENV
OFT
NRFDET
BDO
PWMSEL
SPPOL
1.8V
REGULATOR
IC705
C0CBAAC00112
/RFDET
OFTR

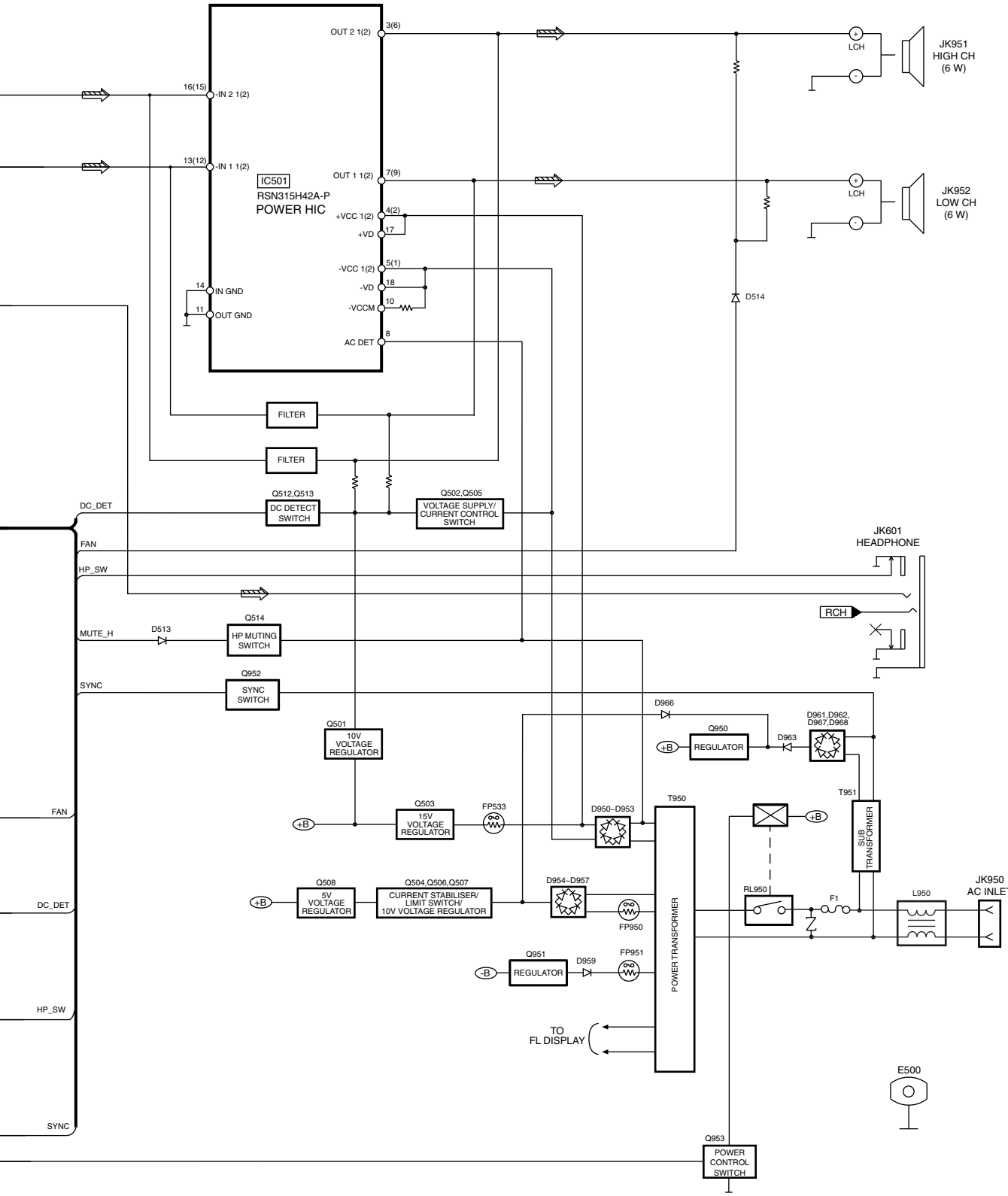

FM ANT
Z120
MIXER
RF AMP
OSC
BUFFER
(FM)
CF201
Q101,Q102
FM IF AMP
CF202
AM ANT
Z101
AM ANT COIL
AM OSC COIL
Q110
SWITCH
RCH
ALC
AM OSC
BUFFER
AM MIX
AM RM AMP
DECODER
PHASE DET
PILOT CANCEL
STEREO SWITCH
AGC
LEVEL DET
S-CURVE
AM IF
AM DET
FM IF
FM DET
AM/FM IF BUFFER
COMP
TUNING DRIVE
VCO
FF
PILOT DET
REG
SD
ST
X102
Z102
AM IFT
IC101
LA1833NMNTLM
FM/AM IF AMP,
DET/AM OSC,
MIX/FM MPX
ST/DO
SD
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
X103
UNLOCK DETECTOR
SWALLOW COUNTER 1/6,1/17,4 BITS
12 BITS PROGRAMMABLE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
C2B I/F
POWER ON RESET
DO
CE
DI
CL
PLLDA
PLLCLK
Q106
TUNER 15V SUPPLY CONTROL
IC102
LC72131MDTRM
PLL FREQUENCY SYNTHESIZER
DET_OUT
TO CD DRIVE UNIT


FL DISPLAY
FL601
FROM POWER TRANSFORMER
GRID1
GRID14
SEG1
SEG35
SEG36
SEG70
60~66,12~6
13~39,48~41
67~93,101~94
12~1,64,63
59~33,31~24
2,1,64,63
59~33,31~24
IC902
COHBB0000035
MASTER
IC903
C0HBB0000035
SLAVE
XOUT
XIN
/CS
SCK
/RESET
SDATA
P1
P0
IC1
C0GAM0000005
MOTOR DRIVE
IN1
IN2
REG
Vs
OUT1
OUT2
Vref
Vcc
GND
RM1
IC303
C1BB00000715
RDS CIRCUIT
DET_OUT
X302
PLLDA
STAT
ST/DO
PLLCLK
BLKCK
CDRST
SD
Q303
SWITCH
Q302
SWITCH
Q1
POWER SUPPLY CONTROL
SW1
SW2
SW3
SW4
SW5
D1
Q324
SWITCH (PLUNGER SUPPLY)
Q323
SWITCH (PLUNGER SUPPLY)
+B
MLD
MDATA
MCLK
CE
MDATA_OUT
PLLCE
STATUS
RDS_CLK
RDS_DAT
FL_CS1/EFP_RXD1
FL_CLK/EFP_CLK1
/FL_RESET
FL_DOUT/EFP_TXD1
FL_CS2/EFP_BUSY
CHG_CW
CHG_CCW
CHG_PLR
CHG_HLF
CHG_AD2
CHG_AD1
CHG_SW1
CHG_SW2
C2CBJF000006
IC305
MICROPROCESSOR
/RESTSW
SW701
(RESET)
V_JOG_A
V_JOG_B
VR600
JOG VOL
MBP2
MBP1
XOUT
XIN
X303
SWITCH
Q313,Q314



C2CBJF000006 IC305 MICROPROCESSOR


IC301
C0AABB000117
HEADPHONE AMP
IC300
C1BB00000747
AUDIO SOUND PROCESSOR
IC304
C3EBCG000008
EEPROM CIRCUIT
IC302
C1BB00000086
SPECTRUM ANALYSER
C2CBJF000006 IC305 MICROPROCESSOR
IN B1
IN B2
IN C1(2)
A_VOLIN1(2)
REC1(2)
IN D1(2)
IN A1(2)
RCH
AUX JK300
CD SIGNAL
OUT1(2)
VCUT
DATA
CLOCK
AMP
Q401(Q201) AGC SWITCH
Q407 (Q207) MUTING SWITCH
Q402 (Q202) MUTING SWITCH
Q405(Q205) AMP
Q404(Q204) AMP
Q408(Q208) SWITCH
+B
Q403(Q203) HEADPHONE MUTING SWITCH
HP_L(R)
Q406 VOLTAGE REGULATOR
Q301 AUDIO MUTING CONTROL
-B
MUTE_H
Q370~Q375 FAN MOTOR DRIVE
D303,D304, D305
D302
Q315 POWER RESET CONTROL
KEY SW
92~94
EE_CS/EFP_EPM
EE_CLK
EE_DAT
SP_A
SP_B
SP_C
SPE_IN
ASP_DAT
ASP_CLK
MUTE_H
MUTE_A
/RESET/EFP_RESET
DCDET
KEY3
KEY1
SYNC
PCONT
Q312 PCONT SWITCH
Q316, Q317 POWER SUPPLY SWITCH
RMT
SSEQ_LED
Z600
(REMOTE SENSOR)
Q614 LED DRIVER
D929



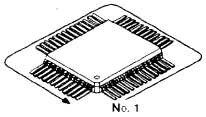
SIGNAL LINES

: MAIN SIGNAL LINE
: FM SIGNAL LINE
: FM OSC SIGNAL LINE
: AM SIGNAL LINE
: AM OSC SIGNAL LINE
: FM /AM SIGNAL LINE
: CD SIGNAL LINE
: CD-DA (AUDIO /VIDEO) SIGNAL LINE
: AUX SIGNAL LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE

( ) Indicates the Pin No. of Right Channel.

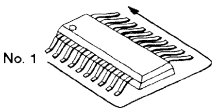
NOTE : Signal Lines are applicable to the Left Channel only.

C2CBJF0000063 (100P)
MNMN6627911AC (80P)

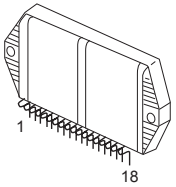


AN7348S-E1 (24P)
AN8885SBE1 (28P)
C1BB00000747 (42P)
C1BB00000086 (18P)
C1BB00000715 (16P)
C3ABMB000027 (24P)
LA1833NMNTLM (24P)
LC72131MDTRM (20P)

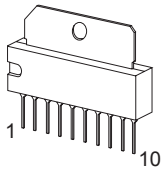
C0HBB0000035 (64P)



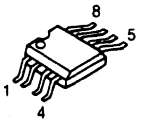
RSN315H42A-P



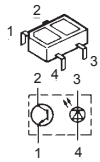
C0GAM0000005



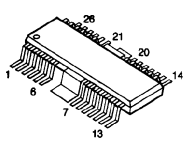
C0AABB000117



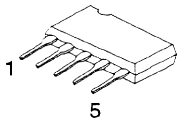
CNB13030R2AU



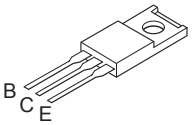
AN8739SBTE2



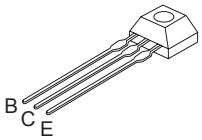
C1AA00000612



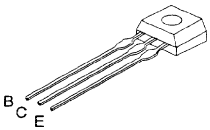
KTC2026
KTA1046



B1AAGC000007
KRA102MTA
KRA110MTA
KRC102MTA
KRC103MTA

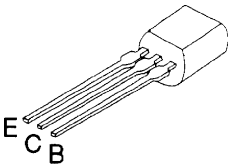


KTA1267GRTA
KTC3199GRTA

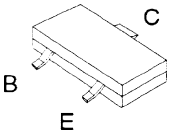


2SC2058SPTA

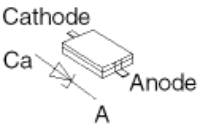
KTA12710YTA
KTC3205YTA
KTD1146YTA
2SB621ARSTA
2SD0592ARA
B1AAKD000009



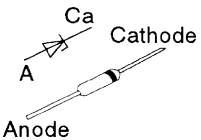
B1ADCF000001
B1ABCF000011
KRA102STA
KRC101STA
KRC102STA
KTC3875GRTA
KTD1304TA



1SS380TE-17
B0BC3R700004
B0ACCK000005
B0BC5R000009
UDZSTE1710B



B0BA4R600003



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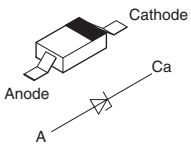
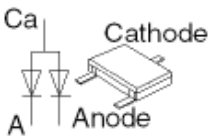


B0ADCJ000020



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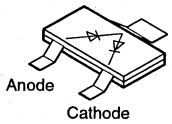
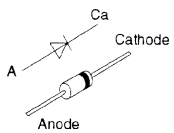
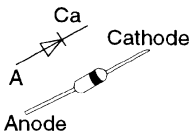


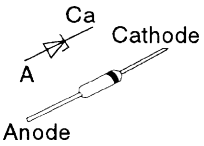
1T3T
1N5402BM21
RL1N4003N02
RL1N4003S-P
B0EAKM000085



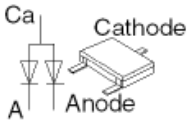
B0AACK000004
B0BA01400041
MA2J72800L
MA2C16500E



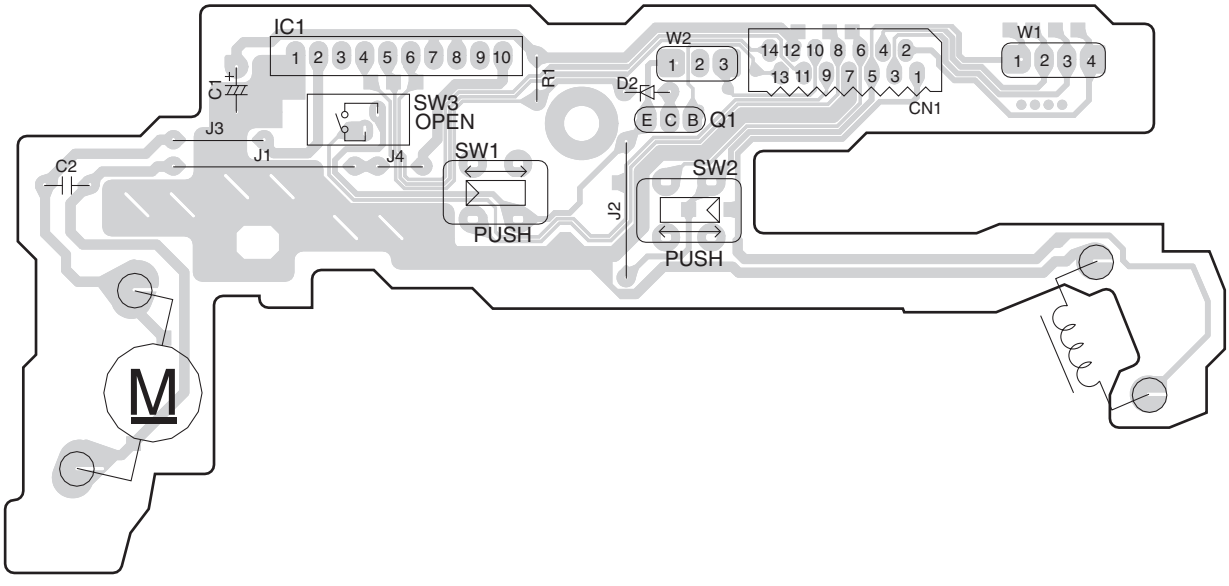
B0BA01500003
B0BA5R600016
B0BA6R600008
B0BA9R600002



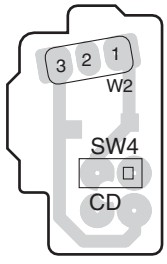
B0BADCJ000020



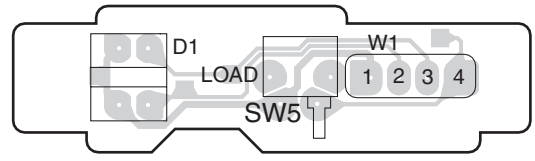
H CD LOADING P.C.B (REP2578A-N)



F CD DETECT P.C.B (REP2578A-N)



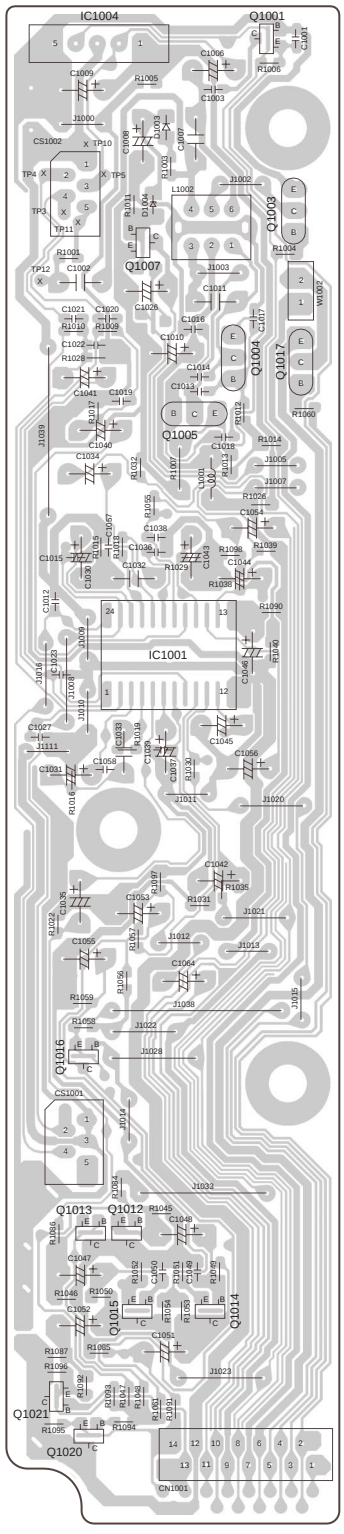
G SPINDLE POSITION P.C.B (REP2578A-N)



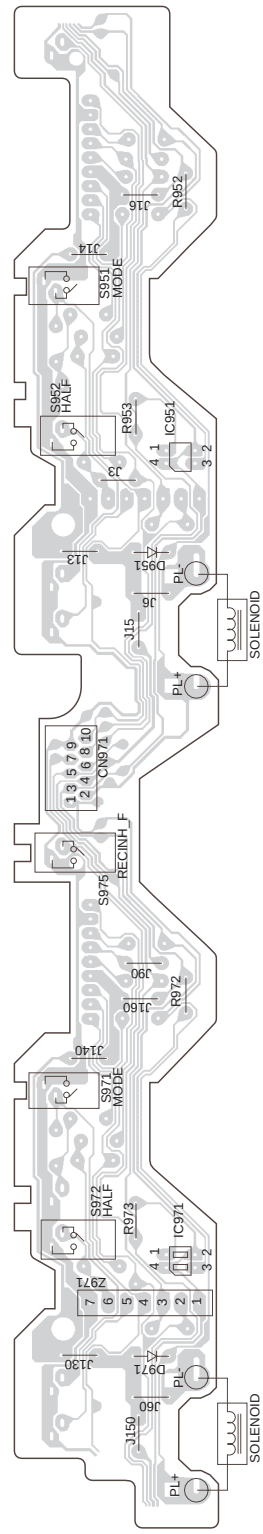
A B C D E F G

1 2 3 4 5 6 7 8 9

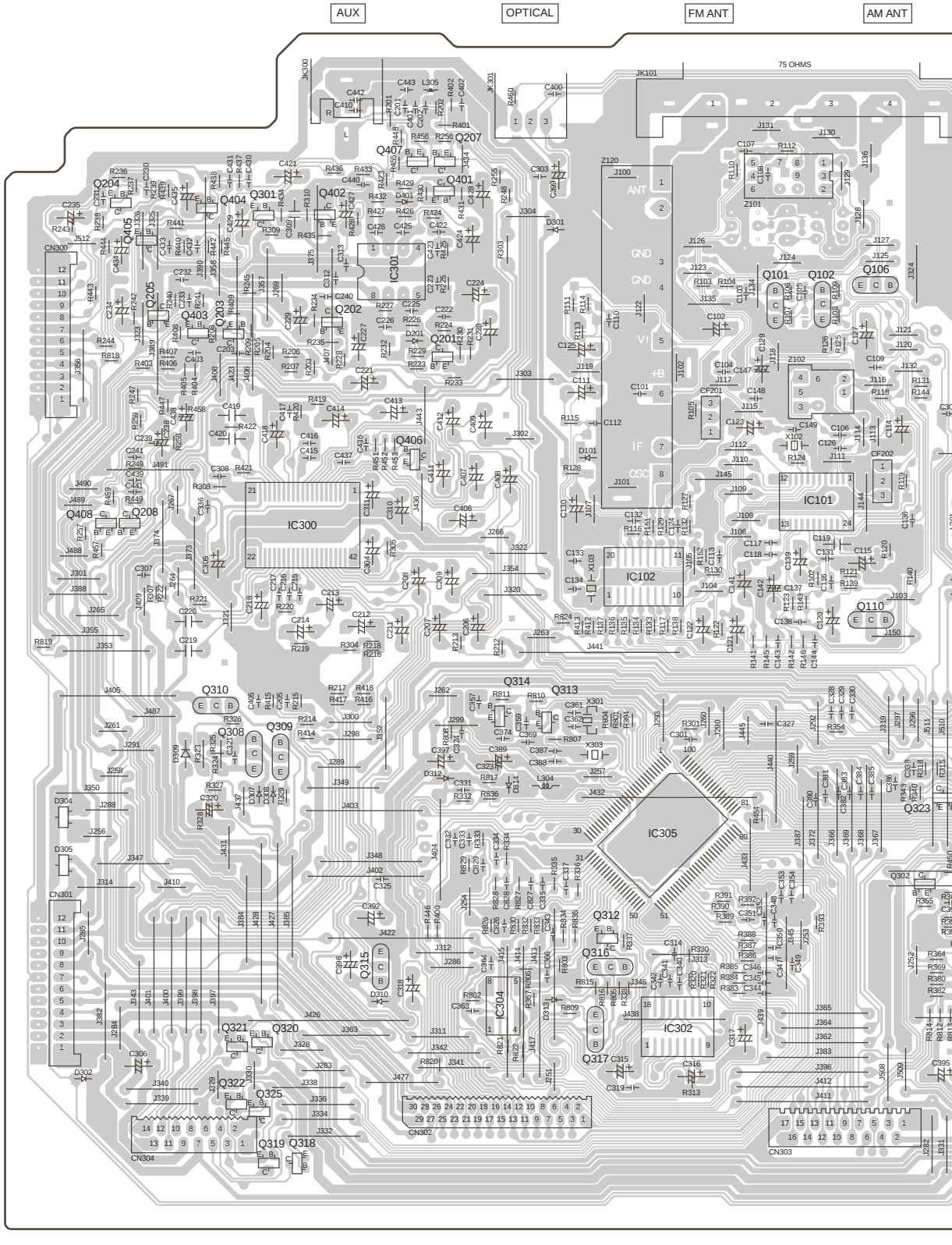
J DECK P.C.B. (REPX0331A)

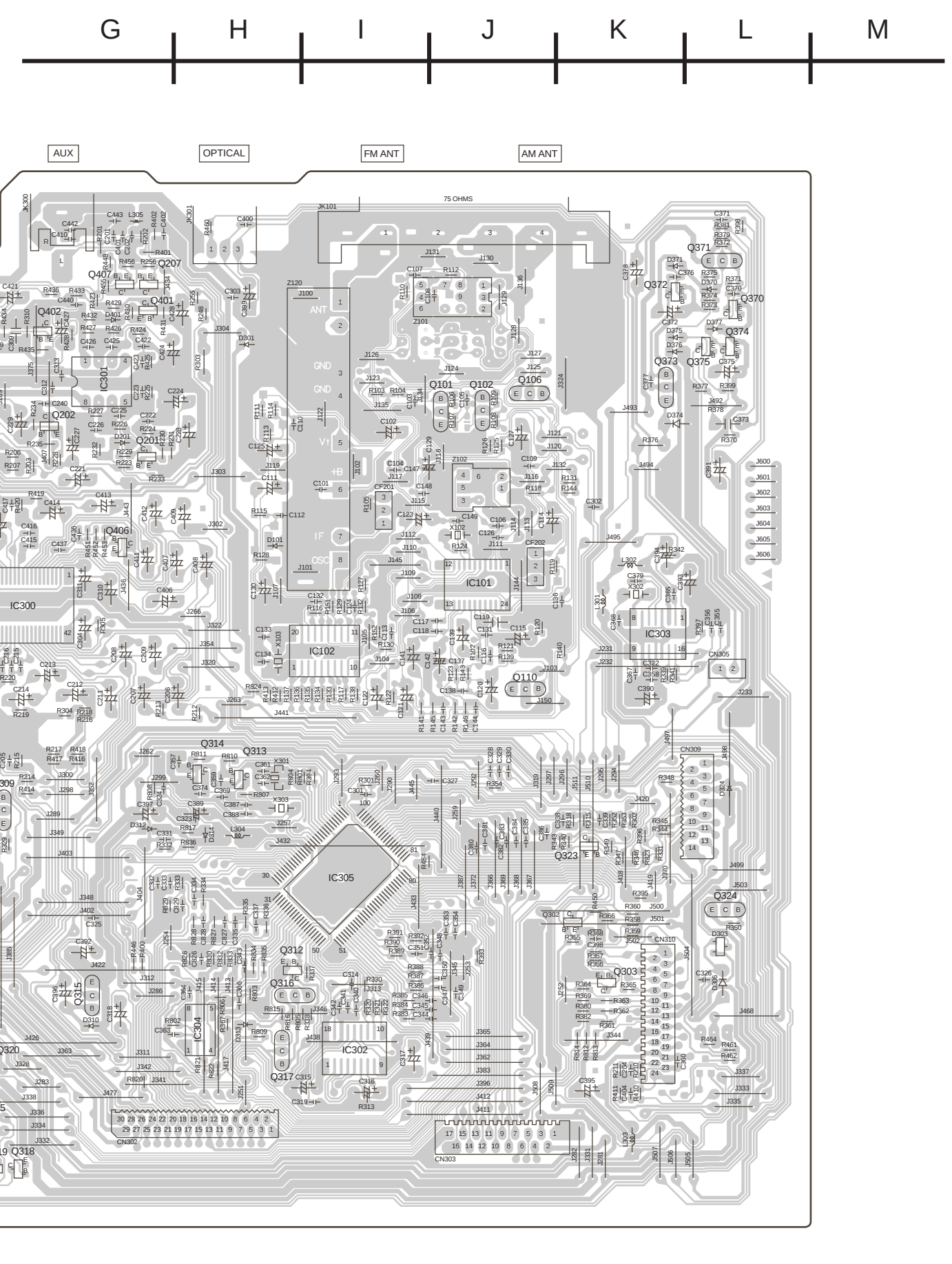


K DECK MECHANISM P.C.B. (REPX0321A)



B MAIN P.C.B (REPX0355A)




G
H
I
J
K
L
M
AUX
OPTICAL
FM ANT
AM ANT
75 OHMS
IC300
IC301
IC302
IC303
IC304
IC305
IC101
IC102
Q101
Q102
Q106
Q110
Q202
Q207
Q401
Q407
Q406
Q371
Q372
Q373
Q374
Q375
Q370
Q303
Q312
Q313
Q314
Q315
Q316
Q317
Q318
Q323
Q324
CN302
CN303
CN305
CN309
CN310